
THE CHILD

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PREFACE

The matter of the child's adjustment to his social needs dominates the discussion of this text. The first half of the book is allotted to tracing the development of the child's personality, and the second half to examining the social experience through which his personality develops. The content of this book should be of use to students of the child, whether their primary interest be theory or guidance.

A word is in order about the *Readings* with which each chapter is concluded. The writer has wished to avoid having these reference lists consist of just so much useless material appended as a matter of academic form. He has sought to vitalize each listed title by means of specific questions. It is hoped that these queries will assist students to approach their collateral reading with intelligent purpose.

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PART I
INTRODUCTION

CHAPTER I

THE SOCIAL SIGNIFICANCE OF CHILD STUDY

"Wherever there are children, there is the Golden Age."

—GOETHE

I. Our Imperative Social Need

Less than 100 years ago, Matthew Arnold and Thomas Huxley debated at length the question as to what kind of education was most worth while. Mechanical science had made its appearance among men and had already transformed their lives in countless outer respects. But Matthew Arnold held to his faith in the classics; a familiarity with "men and letters of all times" was supremely to be desired. Thomas Huxley championed the new science. He forcibly argued that a knowledge of the natural and physical sciences was most useful to one who would be other than an ignoramus in a rapidly changing world. Who was in the right?

Time has weighed the two positions in the balance and found both to be wanting. A knowledge of the classics, by itself, is a dead knowledge, for it represents a retreat from the active, ever-changing life we live. This knowledge glorifies the past, when we should be probing the present and planning the future. But familiarity with natural science is, by itself, even worse than petrified. It is perilous. To be sure, the dedication of our zeal to mechanical science has resulted in the multiplication of creature-comforts. But this same zeal has fabricated a Frankenstein, a horrible monster of vast proportions capable of destroying those that fashioned him. The prospect of war is more menacing than ever, and the persons who live in abject poverty in our midst continue to be legion. It is appallingly clear that further

invention and utilization of mechanical devices constitute no open sesame to human happiness.

More than we need better control over the forces of nature, we need better control over ourselves. Not an improved management of nature but of *human nature*: this is our immediate need. Herbert Spencer struck nearer the truth than either Arnold or Huxley. In his classic essay on "What Education Is of Most Worth?" he suggested the truth that, if we must choose, nothing can compare in value with an education that stresses the cultivation of character.

Society, up to the present time, has educated its children for many things: for economic usefulness, for warfare, for personal refinement. The urgent need of the present is for an education of the child's *personality*. Before men can be entrusted with power over the lives of others, they must be MEN: wholesome, adjusted, integrated personalities.

II. The Golden Opportunity

Happily there is growing recognition that "the fault is not with our stars but with ourselves" that we are so wretched socially. And with this recognition there has come increasing attention to the study of man, for it is clear that we must understand human nature if we are to transform it. The history of science shows a movement from the study of the stars to the study of ourselves. Astronomy was the first science to develop and sociology the last.

Granting the preëminent social importance of the quality of our human nature, the problem then becomes one of molding personality aright. We have now to see that, in this fashioning process, the period of childhood is the golden age of our opportunity. It is in this period that the foundations of growth and development are laid. Differing as they do upon almost every phase of development itself, it is significant that the various schools of psychology are nevertheless in entire accord as to the commanding position which the early years of life assume in the shaping of the human personality.

✓ [The period of early childhood is the time of greatest consequence as regards personality on two chief accounts: (1) the

rapidity of maturation during this time and (2) the virgin nature of the nervous system. With respect to the first of these factors, we may observe that much of the child's total growth is concentrated in the early years of life. The older the child gets, the longer will it take him to grow a fixed, proportionate amount. Take for example his brain, which is so vital to his conduct. At birth the brain has only 20 per cent of its ultimate weight. By the end of the second year, the brain has attained about 60 per cent of its final weight, and by the end of the sixth year is about 90 per cent as heavy as an adult's. The cortex, the area of control in the brain, matures even more rapidly. It achieves its full thickness by the time the child is fifteen months old. This rapidity with which the child grows during the early years of his life obviously makes this time one of special significance for the future personality.

There is an early momentum to the child's mental life which matches the rapid pace of his physical and nervous development. Anyone who has watched an infant can testify to the apparent infinity of the number of his body movements. He applies himself zealously to the testing out, to the strengthening of his powers. He experiments with all his senses. The amount of learning that results is prodigious. Indeed almost all the important sensori-motor patterns are established during the early years. Never again will we witness such amazing development of behavior as occurs during the pre-school period.

But the period of early childhood would remain the golden age for the formation of personality even if development were not particularly rapid during this time. This period needs no claim to preëminence other than the fact of its priority in point of time. The popular belief that first impressions are most important is scientifically valid. The early period enjoys the benefits of a fresh, untrammelled nervous system. Of what import is this condition? It means that the first stimulations to reach the cortex are received most hospitably. All subsequent invaders of the nervous system must reckon with the presence of the first-comers. More technically, the first impressions which the child receives elicit certain responses from him. If these stimulations continue, the appropriate responses follow, until through a degree of repetition definite neural patterns are established in

the cortex of the child's brain. Once established, these patterns dispose the child to a regularity of conduct in a given situation. New impressions must now reckon with these established neural paths. The influence of every experience in the life of the child is thus conditioned by all the experiences which have preceded it. This is the second reason why students of human nature acknowledge the sovereignty of the early years of life in the realm of personality.

If, as the writer believes, the urgent need of the present is for more adequate development of human personality and if, further, the period of childhood dominates this development, it follows that we can come closest to realizing our need by exacting attention to the growth of the child. We are wont to believe, correctly, that knowledge is the basis of power. We cannot shape anything intelligently unless we have full knowledge about the thing we are molding. The necessity for a thorough-going understanding of the nature and nurture of the child as a basis for intelligent direction of his development is apparent. Fortunately a large fund of knowledge concerning the child is available. The present century has seen a marked dedication of science to research in the field of child growth and development. From the standpoint of scientific study as well as social endeavor this is, as Ellen Key expressed it, "the child's century." It will be our business in the pages ahead to view the child in the process of achieving his personality and his social interests.

Before assuming this task, however, one thing needs first to take our attention. In advance of any discussion of the specific development of the child, it is essential that we have some conception of what we should like to have the child develop *into*. We should hardly presume to guide a stranger, and to supply him with directions, without knowledge of his destination. Our first assignment, then, becomes the formulation of goals for child guidance.

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(Part I: "Introduction"—Why have these cases been presented

to the public? What problems are represented by the children of this study? Of what significance was their home background?)

2. Anderson, J. E., and Goodenough, F., *Experimental Child Study*, Century, New York, 1931.

(Part I: Chap. 3: "Modern Methods of Child Study"—What are these "modern methods"? What is the meaning of this statement: "The method is fitted to the problem, not the problem to the method"?)

3. Baldwin, B. T., and Stecher, L. I., *The Psychology of the Pre-School Child*, Appleton, New York, 1924.

(Chap. I: "Interest in the Pre-School Child"—What movements in the field of child study are recounted? How do these differ in nature from the older methods also enumerated? Describe the Iowa pre-school laboratories, as they were at the time this book was written.)

4. Blanton, S. and M. G., *Child Guidance*, Century, New York, 1927.

(Chap. I: "Child Guidance"—According to the writers, what is the "new formula" needed by those who deal with children?)

5. Chamberlain, A. F., *The Child (A Study in the Evolution of Man)*, W. Scott, Ltd., London, 1900.

(Chap. I: "The Meaning of the Helplessness of Infancy"—What is the significance of the lengthened period of human immaturity? Of the author's phrase: "to ensure the sociality of the race"?)

6. Chapin, H. D., *Heredity and Child Culture*, Dutton, New York, 1928.

(Chap. I: "Importance of the Child"—Why does the author urge us to "concentrate on the child"? Do you agree with him on this point?)

7. Cooper, M. L., *Seven Psychological Portraits*, Morehouse, Milwaukee, 1928.

(Chap. I: "Introduction"—In the view of the writer, what does the study of the child include? What is a "psychological portrait"?)

8. Gesell, A. L., *The Guidance of Mental Growth in Infant and Child*, Macmillan, New York, 1930.

(Part I: Chap. 6: "The Nursery School Movement of the Twentieth Century"—Describe the equipment for child study at the Yale Psycho-Clinic. Of what value is such study?)

9. Gruenberg, B. C. and S. M., "What Is Parent Education All About?" *Parents' Magazine*, VI:14, September, 1931.

(List the different "types" of education in the field of child

- guidance which the writers describe. Is too much expected of parents in the way of preparation for their responsibilities?)
10. Kirkpatrick, E. A., *Fundamentals of Child Study*, Macmillan, New York, 1912.
(Chap. I: "Nature, Scope, and Problems of Child Study"—How do children differ from adults? What distinction is made between "inner" and "outer" factors in development? Can you name any other respects in which they differ?)
 11. Miller, H. C., *The New Psychology and the Parent*, Boni, New York, 1928.
(Chap. I: "Parenthood: and some of its failures"—In what four outstanding ways, according to Miller, may parents fail to be good parents? Do these include all that are fundamental?)
 12. Murchison, C. A., ed., *A Handbook of Child Psychology*, Clark Univ. Press, Worcester, 1931.
(Chap. I: "The Methods of Child Psychology"—What are the twelve methods that are considered? Which are the most recent? Which, in your judgment, the most serviceable? Why?)
 13. Pierce, F., *Understanding Our Children*, Dutton, New York, 1926.
(Sec. I: "Facing Parenthood"—What is the author's method of introducing the need for child study? Do you think it effective? What point was there to having Mr. and Mrs. N. tell of their own childhood?)
 14. Swift, E. J., *The Psychology of Childhood*, Appleton, New York, 1930.
(Chap. I: "Looking Backward"—What was G. Stanley Hall's relation to the child study movement? How do you account for the recency of child study? What are the prospects for the movement?)
 15. White, W. A., *The Mental Hygiene of Childhood*, Little, Brown, Boston, 1927.
(Chap. I: "The Child"—What is the author's "concept" of the child? How does this conform to your own idea?)
 16. Zachry, C. B., *Personality Adjustments of School Children*, Scribner's, New York, 1929.
(Intr.: "The Necessity for a Complete Study of the Child"—How are causes of behavior to be distinguished from symptoms? What is a case history? What is a "complete study"? Do you think such a study possible?)

CHAPTER II

GOALS IN CHILD GUIDANCE

"I will go anywhere, provided it be forward."

—LIVINGSTONE

I. The Significance of Goals

The concept of goals. What is a goal? It is a definite mark or objective which we seek to attain. There are, in this definition, two elements of which we must take note. First, the idea of *goal* implies a movement forward, a striving onward, a state of progressive activity. Second, and even more significant, the term *goal* represents an objective that is capable of realization. Therefore, we may say that a goal is an attainable end. In this latter respect it may be distinguished from an *ideal*, which is incapable of achievement. This can be judged from the close relationship between the words *ideal* and *idea*, and from the fact that ideas exist not in the world but in the human mind. Ideals are thus observed to be not real but romantic; they are not attainable but approachable. In this view, we may speak, for example, of the ideal of *perfect* health, and of the goal of *good* health. When the Bible enjoins us: "Be ye therefore perfect, even as your Father in Heaven is perfect," it sets before us an ideal toward which we can hope only to strive, rather than a goal to which we may attain.

The prevalence of goals. It was one time thought that comparatively few persons actually had goals they lived by. Today the *gestalt* psychology points out the error of this belief. The behavior of all persons is dominated by purpose. Only, in the case of many persons, the purpose behind conduct is not a consciously conceived one. Care must be exercised in noting this fact: there are directive agencies in the experience of a child even when they

are perceived neither by the child who is being guided nor by the adults who direct him.

The value of conscious goals. For all this, it is true that an inarticulate purpose or set of purposes is not all that may be desired for children. Goals not clearly defined, goals not strategically approached, certainly are not so powerful or so trustworthy directives as those we may consciously recognize and pursue. Is it not man's claim to superiority over other forms of life that he is capable of setting up for himself an objective and of achieving it? Those who have children in trust need everlastingly to question themselves on this point: "Toward what goals are we pointing our children?"

II. The Need for Goals

Present-day demands. Adequate goals have always been essential for "the good life"; but today the need is an imperative one. This condition results from the complexity of our modern social life. As compared with the society of 100 years ago, present-day society shows two signal differences: it is both more compact and more complex. People live together closely in cities and they live more abundantly, thanks to scientific progress. Just living, as a consequence, has become more difficult. Compare the difficulty of driving through city traffic with the ease of travel on the open road and we have a fair picture, in analogy, of the relative demands made upon human nature by the social life of today and that of yesterday. Where life is comparatively simple, as, for example, in primitive societies, child guidance is likewise a comparatively simple affair. These societies make a unified claim upon the child and he has no choice but to respond in the way compelled. The intricacy of present-day life, on the contrary, permits the child to develop many varied patterns. It demands no one thing of him; it sets up no one standard. The upshot of this condition is that, unless he is directed critically, the child becomes disorganized.

Goals in a simple society. This imperative need for behavior standards in our time can be indicated with effectiveness by comparing in some detail the experiences of the primitive and the civilized child. The matter of property rights, an aspect of ex-

perience that the two societies have in common, affords a good subject for this purpose. Let us then look into certain phases of the way in which primitive people view property and teach their children to regard it.

In her fascinating book, Margaret Mead provides us with a picture of the manner in which the native Manus of New Guinea regard property rights. They lay heavy emphasis upon the private character of property, where the property is privately owned. This is a compelling fact, because primitive people as a rule support a system in which common property looms large; in fact, a sort of communalistic economic system generally obtains. For all this, Miss Mead reports that Manus children are early taught a respect for the property rights of others which so far surpasses our teaching in this regard as to amaze us. She writes¹:

But in Manus where property is sacred and one wails for lost property as for the dead, respect for property is taught children from the earliest years. . . . It was sometimes very tiresome to listen to the monotonous reiteration of some mother to her baby. . . . "That isn't yours. That belongs to Piyap. That belongs to Piyap. Put it down. That belongs to Piyap. Put it down." But we reaped the reward of this endless vigilance; all our possessions, fascinating cans of red and yellow food, photographic material, books, were safe from the two- and three-year-olds. . . . Nothing is put out of the child's reach. The mother spreads her tiny colored beads out on a mat . . . right on the floor within the reach of the crawling baby and the baby is taught not to touch them. Where even the dogs are so well trained that fish can be laid on the floor and left there for an hour without danger there are no excuses made for the tiny human beings. A good baby is a baby which never touches anything; a good child is one who never touches anything and never asks for anything not its own. These are the only important items of ethical behavior demanded of children.

Education, tradition, religion, and taboo unite in impressing upon the mind of the child the necessity of a "hands-off" policy.

Goals in a complex society. What a contrast to this picture our own present-day situation makes! It is difficult to know

¹*Growing Up in New Guinea*, Morrow, New York, 1930, pp. 32-33. By permission of, and special arrangement with, the publishers.

what is the salient feature of our attitude toward property rights, but certainly one of the most striking aspects is the wide way in which children vary in their behavior in this regard. Many children in our society touch things not theirs, and not a few actually appropriate them. Why should this be so? In no small measure, this behavior is occasioned by the lack of unanimity among the standards confronting the child, from which he is obliged to form a conception of his own. Many parents are without a policy; all parents do not have a united policy. A number permit their children to touch property not their own, on the ground that it is good "self-expression," that it cultivates the sense of curiosity. A considerable number are vacillating in their attention to this matter, insisting upon respect for private property the one minute and ignoring transgressions the next. Some parents even cultivate in their children the habit of stealing.

This confusing diversity of standards is not limited to property-rights, but extends throughout our social fabric. Modern life is not unified, but diversified. The influences that play upon a child are not consistent. What is right for him to do? He is the recipient of a multitude of answers. His home, his school, his gang, his church, not to mention the movies, the press, and the law, all provide him with divergent impressions. Whatever the policies he chooses to pursue, he will find in modern society a group of persons ready to confirm his decisions. How, then, shall he choose? If his goals are fashioned by his gang, or by the movies he attends, will they be socially acceptable? If he determines upon the adoption of one set of standards for his conduct, how shall he reconcile it with the other, conflicting standards? The need for goals that shall point the child's way out of the social confusion is a pressing one, indeed, in the present time.

A complex society requires that we shall have them; and a variety of distorted types of human character testifies that we have them not. Our first business is obviously to set up such goals for ourselves. What shall they be?

III. The Choice of Goals

How shall we determine what our goals for our children are to be? Let us consider, in turn, three bases for the choice of ob-

jectives for childhood: (1) the social criterion, (2) the criterion of personal desire, and (3) the criterion of science. What sanction does each of these three determinants carry? What recognition does each deserve?

The social criterion. The influence of social custom and social tradition is constantly being felt in the shaping of our goals. On occasion, the force of social tradition may be so powerful as to allow the leaders of children no option. This was the case in the instance out of primitive society cited on page 11. The folkways and mores of the New Guinea culture are so positive in their insistence upon a certain kind of behavior for all the children of that culture, that no other sort of conduct is thinkable. It is extremely doubtful if it ever occurs to a Manus mother to question the validity of the customs of her people. In civilized societies, the pressure of social preferences may not be quite so relentless, and the patterns themselves not so few and simple. But even here it is well to note that social tradition has always played a marked part in determining what children were to become. In ancient Greece, the social preference was for unusual physical fitness; as a consequence, those who were too sorely handicapped from the start were eliminated at birth, by the methods of exposure and abandonment. The rest were molded into the physical pattern that was approved. In a different department of experience, but in a similar way, we find that all children of fair parts in sixteenth century England were brought up on songbooks. He was not even ordinarily educated who could not sing a madrigal on demand, when the host would invite all to join in singing round the table, after dinner. In Colonial America, custom demanded a strange obedience of children. One goal of this period was reflected in two maxims: "A child should be seen but not heard" and "Spare the rod and spoil the child." Obviously the goal for childhood in this time was subordination. During the World War, when social custom assumed terrific pressure, a song went the rounds entitled: "I Didn't Raise My Boy to Be a Soldier." If we examine any age in the history of any people, we will find prevailing social patterns which constitute the goals that are set for the childhood of that period.

The criterion of personal desire. When goals are fixed by society, the parent has no choice but to adopt them. It sometimes

happens, however, that even when custom allows of the free selection of objectives, certain parents fall back upon past policy and make it their own individual practice in the present. Thus, custom no longer sustains the Puritan position on the subordination of the child. Yet there are many adults who still deal with children in such a manner as to indicate they believe in "submission" as one of the chief goals in development. Such a parent acknowledged himself in unmistakable manner recently. The adults about the dinner table were engaging in ordinary talk when suddenly the small voice of one of the boys was heard, as he offered a contribution to the discussion. Without a word, the father reached over from his position at the head of the table, seized his little son by the scruff of the neck, lifted him bodily away from the table into a closet that was near by, and shut the door upon him. This accomplished, without a word of explanation or apology, the father resumed his remarks where they had been intruded upon by his son. Here we observe a father whose goals for his children are grounded upon certain very decided personal opinions with reference to the position of the child.

Since we cannot hope to cover here the entire range of personal desires that leaders have for the children under their charge, we shall limit reference to two types: *personal ambition* and *personal prejudice*. With regard to the first of these, we have already mentioned the natural impulse of parents to covet perfection for their children. They wish to be proud of their children and they can be proud in proportion as their children approach perfection. Oftentimes this causes parents to urge their children into pursuits for which they have neither interest nor ability. A college education may be a mother's hope for her son, in her desire to have him perfect, whereas he may be hopeless as a college prospect. Not infrequently, the life which is conceived for a child by his parents is not so much a reflection of their ambition for him as it is an indication of their desire to make up for lacks which they themselves have suffered in their lives. If years of poverty and toil have meant the denial of "education" to them, they can vicariously acquire it now through their children. How much of what we do for the children under our charge is merely the expression of a desire to provide them with the experiences which we were denied!

As a second basis for the control many adults exercise over youth, prejudice undoubtedly looms large. By prejudice we mean simply conviction that is biased, that is, belief unfounded on fact. A single example of this sort of leadership will be sufficient to indicate its nature. If we turn to the field of social development, and think of goals in this connection, one of the questions that confronts us is: "What sort of relationships ought a child to establish with his fellowmen?" Our fellowmen are of all kinds and colors. In childhood boys and girls, when they follow natural and untutored impulses, play together without particular regard for color or racial differences. Yet, what often happens at this time? The adults responsible for the guidance of these children may have their own prejudices against peoples unlike themselves. As a result they early begin to instil bits of similar antipathy into the minds of the youngsters. In these cases the adult's goal for the social development of the child consists of race prejudice and discrimination.

The criterion of science. We have thus seen that there are two main sets of influences that may work to shape the child's goals: the one (custom and tradition) is objective in nature; the other (adult preference) is subjective. A child, accordingly, may have his destiny determined by what society dictates and by what his elders desire. From the standpoint of science, these are not necessarily adequate bases for determining the goals of childhood, the chief objection to them being that they may ignore the interests of the child himself.

If a scientific touchstone is to be fashioned whereby the goals of childhood may be determined, all the aspects involved in guidance must be taken into account. Many as these are, we find they may be related to two major factors: the child and his society. On the one hand, we have to take into account the society in which the child is to live. Obviously, no developmental objective is adequate if it does not help the child to adjust satisfactorily to the requirements of his society. On the other hand, it will not do to ignore the nature of the child himself. Any adjustment to life which is secured at the cost of a crippled or stunted personality can hardly be deemed a happy one. Thus we must regard both of these factors: the developing impulses of the child and the demands which society makes upon them.

Goals relative to our knowledge of childhood. On the basis of what science now knows about the nature and needs of children, we frame our objectives for childhood. But science is constantly unearthing new facts about child life, and each new discovery may require a new shift in our goals. For example, there was a time, not long ago, when scientists regarded intelligence as a more or less rigid product of inheritance. A child was born with a certain mental capacity. A great deal could be accomplished, in and through the child's situation, toward realizing this capacity to its full. But there was nothing we could do to add cubits to the intellectual height of a child after birth. Today science is tending to think differently about this matter. A number of studies tell us that children who have been privileged to enjoy especially stimulating foster homes over a period of time have increased significantly their intelligence rating. It is quite likely that we shall soon be obliged, in response to such studies, to alter our present goals for the intellectual development of children. Again, we today set up as our goal for the physical welfare of a child a span of life which exceeds by fifteen years that which was conceived half a century ago. Science has made it possible for human beings to live longer, and our physical goals have altered in consequence. Similarly, fifty years ago mothers generally assumed that their children must pass through the familiar so-called children's diseases. The goal of intelligent parenthood was simply to carry the child safely through these "inevitable" diseases. We know today that these diseases are not at all inevitable, that children need not have them. We seek to prevent them. As a result of our better knowledge, we have modified our goals. This is the scientific principle: goals must keep pace with new knowledge.

Science requires goals that are relative not only to our knowledge of childhood but to the nature of the individual child. A concept such as that of "perfection," so often allied with the personal ambitions of parents for their children, has no place in science, for science abides by facts and not by fancies. In place of perfection, science would put "self-realization." A feeble-minded child can hardly hope to become a perfect child. He can, however, develop to the utmost the limited capacities with which he has been provided. A scientific goal must thus be determined

by the nature of the individual child. Because science perceives the relative character of our knowledge of child life, also the changing nature of the social order in which that life has its setting, it offers no goals for childhood which are either fixed or specific. No standard can abide forever; no concrete goal can serve all. It will be observed, therefore, that science provides us with goals that are flexible and adjustable. Science offers us what has been termed "the floating goal."

IV. The Major Goal

Growth. Life has often been likened to a journey along the line of which we dwell in experience. For our present purpose of representing how an adjustment may be effected between the child and society, this is a good figure, except in one vital particular. A real journey is distinguished by the fact that it points toward a single terminal, even though it carry the traveler through many intervening stations. Personality development, however, as exemplified in the maturing of the child, differs from this in the respect that it has no final stopping point. If we are fully alive, we never "arrive" in life. The full import of this fact is contained in the reply of a man of sixty, who was enrolled as a student in college and who was asked by a youthful classmate, "What do you expect to be when you're done with your education?" "Dead," was his reply.

An examination of the character of life thus necessitates the view that the major goal for childhood must be *growth*. This objective satisfies two conditions. In the first place, growth signifies an active state. Life itself is dynamic, and no objective within life can be effective if it is static. It is precisely for this reason that such goals as "obedience" and "loyalty" do not qualify for first place; they denote fixed states of being. Growth, in the second place, suggests an on-going state of experience. Although *continuous* growth is truly the objective we should proclaim, it is hardly essential that we add the qualifying adjective "continuous," for we obviously no longer experience growth when the process does not persist.

Normal and harmonious growth. To the question, "What kind of growth do we covet for the child?" the answer comes,

"Growth that is *normal* and *harmonious*." Normality of development in this case refers to the tempo of change. A normal growth is one which is neither too slow nor too swift. Retardation and acceleration are alike abnormal. The second feature of growth, harmony, has to do with the balance involved in change. Since child nature is a compound of numerous impulses, it is quite apparent that wholesome growth would call for the proper development of each impulse in relation to the rest. Thus an exaggerated emphasis upon health and an underestimation of intellectual development would represent poor guidance. Balance in regard to growth calls for an equilibrium of forces and emphases. This the great educator, Pestalozzi, grasped when he sounded the need for a "harmonious development of all the faculties."

Thus, the keynote of child guidance is continuous growth, normal and harmonious in nature, of all the elements of human personality. We shall bear this in mind throughout. It will serve as a sort of tuning fork by which to test the symphony of the child's development.

V. Plan of Subsequent Chapters

With this concept of the normal and harmonious growth of all the impulses of the child as our touchstone, we are now prepared to examine in turn the development of each of the several aggregates of these impulses: the physical, the mental, the emotional, and the social. Concerning this organization of study, however, we must note a precaution. In life itself we encounter no such divisions as these, for life is a unity, and all things work together there. Yet if we are to examine the human personality, we have no choice but to do violence to the composite nature of reality. Our minds are so ordered that, if we would know life, we must cut life up into its component parts, and then examine each part separately. No real harm will result from this process, if we remain conscious of the fact that, in truth, life is an organic whole.

In advance of these specific considerations of the physical, mental, emotional, and social aspects of growth, one thing remains to be done. We can hardly discuss the development of the child

if we lack knowledge of the nature of the new-born self that is to develop. The impulses, the predispositions, the possibilities with which the child starts life—these are the contribution of his heredity. These are the seeds that are to grow. What is their nature? Our immediate task thus becomes a survey of the child's biologic inheritance.

READINGS

1. Anderson, J. E., and Goodenough, F., *Experimental Child Study*, Century, New York, 1931.
(Chap. II: "Fundamental Principles of Development"—What meaning do the writers attach to the following statement: "Continuity rather than discontinuity is characteristic of all development"? List the principles which they present.)
2. Cline, E. C., "Growing Up," *Parents' Magazine*, 5:13, October, 1930.
(Is "growing" the same as having "grown up"? When is a child grown up? Are there any objective tests of maturity?)
3. Embree, E. R., "A Conversation in Peking," *Atlantic Monthly*, 146:561, November, 1930.
(How does this discussion reveal the relative nature of goals? According to the writer on what basis do the goals of different civilizations rest?)
4. Fisher, D. C., "At Home in Any World," *Child Study*, 9:155, February, 1932.
(It is vain to prepare them [children] *in detail* for meeting life . . . Why so? What basic principles of child guidance are proposed?)
5. Franklin, Z. C., "Parents Also Grow," *Child Study*, 8:127, January, 1931.
(What "two moves" must the parent make in order to keep growing? What does the author mean by "the changing world of the child"?)
6. Gesell, A. L., *The Guidance of Mental Growth in Infant and Child*, Macmillan, New York, 1930.
(Part I: "The Progress of Guidance Concepts"—consists of six chapters of historical review.—What are the present concepts? Are any of these simply old ideas in new verbal garb? What worth while concepts did the 18th and 19th centuries evolve?)

7. Gesell, A. L., *Infancy and Human Growth*, Macmillan, New York, 1928.
(What unique interpretation of the concept of growth is offered?)
8. Gray, J. S., "Breadth of View as the Aim of Education," *Journal of Educational Sociology*, 5:282, January, 1932.
(“Survival seems to be the chief end in life.” How does the writer substantiate this statement? How does “self-survival” differ from “group-survival”?)
9. Gruenberg, S. M., *Your Child Today and Tomorrow*, Lippincott, Philadelphia, 1928.
(Chap. II: “The First Great Law”—What is meant by the statement that we should educate *through* obedience and not *for* it? What reflection on the nature of goals for childhood is embodied in the title of this book?)
10. Hollingworth, L. S., “Parents Must Grow,” *Parents’ Magazine*, 5:26, June, 1930.
(How do parents behave who have not developed fully? With what new thought does the author provide you?)
11. Miller, H. C., *The New Psychology and the Parent*, Boni, New York, 1928.
(Chap. I: “Parenthood”—What goals are set up? Are they adequate? Why?)
12. Mead, M., *Coming of Age in Samoa*, Morrow, New York, 1928.
(Chap. III: “The Education of the Samoan Child”—What are the highlights of this education? What principles underly it? Explain: “. . . they [parents] are more interested in peace than in forming the characters of their small charges.” Also, indicate what circumstances in Samoa conspire to keep children from being lazy.)
13. Pilpel, C., “In Search of Goals,” *Child Study*, 9:167, February, 1932.
(Do you agree with the writer that we tend to adopt as conduct-principles those that support our *desires*? What does she suggest is a way out of this process of self-justification? Why does the writer feel it is important for father and mother to agree on goals?)
14. Ward, J. C., “Children of Freedom,” *Harper’s*, 162:296, February, 1931.
(Upon what principles of guidance has the education of these

children been founded? What essential element of harmonious growth has been overlooked? What accounts for the setting up of *freedom* as a goal in child guidance?)

15. Williams, F. E., "The Importance of Social Relationships in the Development of the Personality and Character of the Adolescent," *Mental Hygiene*, 14:901, October, 1930.

("If we can successfully immunize the child against these things [social evils], their existence in the world does not greatly matter." What goal for childhood is implied in this statement? How does the author sustain his position?)

PART II

CHILD DEVELOPMENT

CHAPTER III

THE CHILD'S HEREDITY

"Which of you by taking thought can add one cubit to his stature?"

—THE BIBLE

I. The Meaning of Heredity

We can catch the meaning of the term *heredity* by setting it off against another term from which it is commonly distinguished, namely, *environment*. In popular usage, these two words enjoy distinct, separate interpretations, and while we shall find that this general tendency to regard them thus in opposition has little basis in fact, nevertheless, the peculiar nature of the one stands out when contrasted with that of the other. Thus, *inheritance* designates that which "inheres" in the nature of the child, whereas that which "environs" this inherent element goes by the name *environment*. The former is present from the first, in "the blood" of the child; the latter surrounds the child from the start, in the form of circumstance. To the first goes the name "original nature," to the second the designation "nurture." Sometimes these two sets of factors are looked upon as the Siamese twins of human experience, and as such require a common surname. Then the one that represents transmission through the germ plasm is baptized *biological inheritance*, and the other that constitutes the substance and impress of experience is called *social inheritance*.¹

It is comparatively simple to effect this verbal distinction between the terms *heredity* and *environment*, but confusion often follows the question as to where in actuality the environment

¹For a simply written exposition of the nature of heredity, see Popenoe, P., *The Child's Heredity*, Williams and Wilkins, Baltimore, 1929, Chaps. I and XXV.

begins. The traditional and popular idea has been to regard the origin of environment as coincident in time with childbirth. We know, however, that the child's environment extends back before this occasion. It reaches back to the time of his conception. The initial environment comprises all the factors capable of influencing the growth of the fertilized egg.

There are practical implications in this representation of the child's environment as extending back to the union of the original life cells, the sperm and the egg. This emphasis calls attention to the significance of the whole history of the child, and stresses the importance of the child's pre-natal environment. By pointing out the true beginnings of environmental influence in the life of the child, science has made parents conscious of the important fact that far earlier than they previously thought they may exercise influence over the shaping of their child's destiny. As a consequence, intelligent parents now give zealous attention to the pre-natal period, to ensure for the seed of life the most opportune soil and circumstances for growth.

II. The Significance of Heredity

We have not only to understand the meaning of heredity; we must also estimate its importance. Popular discussion attempts this in the oft-put question as to which is the more important, heredity or environment? This is by no means an irrelevant query. It carries vast social implications. If we conclude that heredity is the more vital influence, we should want to frame our social policy in consistency with this point of view. This might mean, for example, our doing less than we do now for children after they are once born, and our doing a great deal more than we now do to ensure good birth. That is to say, although we should want to heed both factors, we would feel compelled to lay our chief emphasis on desirable heredity. *Eugenics* would thus become the main concern of all who have to do with children. On the other hand, if we believe that environmental factors are of first importance, we are at once led to the adoption of a different social policy. In this view, we heed heredity less and social happenings more. *Euthenics* comes into the ascendancy as the social program of the first order.

The interdependence of heredity and environment. In estimating the relative power in the life of the child of heredity and environment, we make an auspicious start by acknowledging that both are indispensable to existence.² Life is inconceivable without both. Obviously there is no existence where there is no seed, and just as clearly, there is no sprouting of seed where there is no setting: soil, sunshine, and water. There must be something that is capable of life and of growth (inheritance) and this something must have a setting in which to live and grow (environment). These two aspects are inseparable and work together in the unity of human experience.

For all this obvious interdependence of heredity and environment, a survey of pedagogical theory shows that educators have frequently laid so much emphasis on the one as to discount entirely the significance of the other. For instance, the Hegelian doctrine of "unfolding" held that all that a child ever was to be was from the first present in his nature; a sensible school experience consisted, therefore, merely of a setting which would permit the latent tendencies to assert themselves. Make no attempt to shape the child's nature; let the child's personality unfold itself in accordance with the divine plan planted in his being with the beginning of his life.

It must be perfectly apparent that an emphasis upon inheritance such as the above acts to rule out almost entirely the effect of experience in the shaping of personality. This outcome is not by any means a matter of mere theoretical speculation; it harbors vast social implications, for we build our social practices upon it. The single example of our treatment of the feeble-minded makes this point manifest. When it was thought by the scientific world that all feeble-mindedness was a consequence of faulty inheritance, and that nothing which society might do for this handicap would in any measure prevail against it, the feeble-minded were simply institutionalized. Later, our conceptions of feeble-mindedness underwent two modifications. First, it was discovered that certain degrees of feeble-mindedness would and did yield to social ministration; the moron was found to benefit bountifully from a training which aimed to make him both

² Cf. Conklin, E. G., *Heredity and Environment*, Princeton Univ. Press, Princeton, 1922, p. 60.

agreeable as a person and useful as a worker. Second, it developed that all feeble-mindedness could not be charged up to inheritance, that many times experience would have to assume the responsibility for it. Now we know there are social as well as biological causes for mental deficiency. The upshot of our better knowledge has been the effecting of a different policy for the care of the mentally handicapped. Without ignoring heritable factors, when they do exist, we nevertheless do not fail to acknowledge the rôle of experience in producing feeble-mindedness. And, whether the deficiency be due to latent or to acquired factors, we today credit to propitious circumstances the power to work great changes in the lives of these unfortunates. Indeed, the very concept of feeble-mindedness has itself taken on a social meaning, so that we cannot speak of the manifestation of this trait in any person without reference to the society in which he is obliged to live.

If the extreme attention to the forces of heredity has led inevitably to the neglect of social considerations, the exact reverse may be said for the tendency to focus attention exclusively upon the powers of experience. By glorifying the effects of his social setting oftentimes the potency of the child's inheritance has been underestimated. Thus, John Locke taught that the child's mind might at birth be likened to a blank tablet (a "tabula rasa," he called it). Upon this clear surface of the child's mind, experience and education might write what they would. It was altogether within the power of environment to fashion the child at will. In somewhat the same manner John Watson, the psychologist, today declares that, if you will give him any two children of normal, healthy inheritance and provide him with the environments of his own choosing, he will pledge himself to make of either child a genius, and of the other child a criminal or scoundrel of the lowest order. Unlike Locke, Watson does recognize the existence of inherited tendencies; he is congenial with Locke, however, in his zeal to vaunt the supreme importance of environment in the shaping of human destiny. In his ardor, he unquestionably underestimates the contribution of biological inheritance.

An undue stress upon either heredity or environment is likely to prove a biased and unwarranted emphasis, and especially

will this be the case where the one is sponsored to the complete neglect of the other. A balanced view calls for at least these two things: first, the recognition that human personality is the product of both forces; and second, that both are subject to control. Such a position does not necessarily commit one to the belief that both heredity and social experience are of equal significance in the lives of all children. In the last analysis, each life history will have to be studied in its own right, in the allotting of relative honors to these two forces.

The increasing control of culture. There is good evidence to support the view that the control of social environment over the forces of heredity is progressive. Science gives man increasing command over his initial equipment. With each advance in our understanding of the determinants of human nature goes a corresponding degree of power over these natural bases. Already science is regulating features of inheritance that once were regarded as far beyond the possibility of human control. With further knowledge of the actions of our ductless glands, for example, should go far-reaching regulation of factors deemed unchangeable, e.g., intelligence, temperament, pigmentation, and stature.

Thus we see that, although heredity and environment are both requisite to life, the progress of science has elevated environmental influence to a position of increasing significance. Less and less will it matter what the child's natural inheritance comprises; more and more must it matter what science can teach us to do either in transforming what is "natural" or in determining the child's original nature itself.

III. Factors in Heredity

For all the simplicity of his outer aspect, the child at birth is an extremely complex creature. This fact emerges when we consider that the child epitomizes the whole history of humanity that has preceded him. He is left to carry on the precious life stream that has been sustained through endless years. Imagination can hardly conceive of the cumulative experience of this life blood that courses through the body of the new-born babe. He is the most recent representative of a rich heritage,

of many streams that have united in shaping his nature. For practical purposes, it may be advantageous to consider the content of the child's heredity in relation to four factors: (1) The Human Species, (2) Race, (3) Sex, and (4) Family. We shall examine, in turn, certain salient elements associated with each.

IV. Heredity and the Human Species

Nature supplies the child with distinctive human equipment. The human child is born with a constitution and with qualities which are unlike those of other creatures. He is not only a being, he is a *human* being. This at once obliges us to ask of what his "humanness" consists; and the answer must be forthcoming in terms of a contrast between the original nature of the human child and that of all other animal children.

Physiology. The child's uniqueness begins with his special physiology and structure. He possesses a distinct skeleton or form. Two elements of his form make him a novel being. He enjoys, first, an upright posture. This strikes us as so ordinary an observation that we take it for granted. Yet it holds the secret, in part, of man's superiority over other animals. An upright posture allows the free use of the hands; in fact it converts into hands what would otherwise have to serve as feet. Second, the human child is blessed with a pliable thumb which is also set off in opposition to the other fingers of the hand. This position of the thumb contrasts with the position of the big toe, which is set in uniformity with the other toes of the foot. Not often do we realize what an inestimable boon humanity enjoys in its special kind of thumb. It makes possible the grasping of objects in a convenient and easy manner, an advantage which has been the basis of man's achievement of civilization, built upon the use of tools.

Capacity for speech. The capacity for speech with which the child is endowed further distinguishes him from the young of other species. This capacity rests in part upon the special construction of his vocal apparatus, throat and mouth; it is thus founded in part upon physiological structure in the locality of the sound itself. In addition, however, the child's ability

to use language rests upon his possession of a cortical region which exceeds in elaborateness that of other creatures. The more intricate, delicate, and differentiated brain of the human babe, together with his peculiar throat and mouth structure, provides him with the basis for this superiority in speech.

Human children and other animal children are alike at birth in their ability to make various sounds. But the human child early distinguishes himself by his ability to convert mere sounds into speech or language, that is, complex organized ways of expressing himself vocally. The animal must content himself always with elementary sounds, which he is able to produce from the start and which he instinctively recognizes; as, for example, the danger bleat of the lamb. Seldom does any animal learn to make new sounds in the course of his experience, when he is left to his own resources. Under the tutelage of man, animals have been taught to utter, after a fashion, a certain limited number of "words." Dogs have thus been trained, and a few man-like apes, notably, chimpanzees. But there are rigorous limits to their teachability along this line.

Native impulses. The human child bears at birth not only a structure which differs from that of other species, but an impulsive nature as well which is not congenial with theirs. To be sure, the two natures are not altogether dissimilar. Man and beast live in a common world, which makes common demands upon both, and we should accordingly expect both to respond in fundamentally similar ways. Both the human child and the animal child possess the elementary cravings of hunger, sex, and self-preservation.

But the young of the human species and the young of other species differ in the manner in which these dispositions are expressed. Whereas, for example, the human child and the chick have the common feeling of hunger, each satisfies this urge in a distinctive manner. Fairly from the first instant of life the chick can peck away at a grain of corn; indeed, experience adds little or nothing to his command of this process. On the extreme contrary, the human child lacks the power to feed himself and must altogether rely upon the ministrations of others, if he is to survive. He is an inadequate creature as compared with the chick. But as he gets older, his behavior in

becomes far more complex than that of the chick. The child will develop a food ritual; he will eat certain foods only, he will see to it that they are prepared according to his taste, he will employ certain manners in the consumption of them. His eating experience becomes an elaborate, socialized occasion.

There is a growing tendency in the psychologic literature to recognize that the inherited equipment of the human child is capable of considerable modification at the hands of experience, and in consequence of this fact, to refer to the plastic original tendencies as *impulses*. The term *instincts* is reserved to characterize the inheritance of animals.³

V. Heredity and Race

We have so far looked into the scope of inheritance which comes to a child by virtue of his being a human being. We are all members of *homo sapiens*, and we have accordingly a humanity that distinguishes us from other orders of existence. In certain respects we are like one another, because of this commonness of origin. But, on account of long geographic isolation of divisions of the human race after early migrations from a common habitat, relative differences in peoples have resulted. The so-called races have been fashioned through their living apart from one another in different climes and under diverse conditions. As a result, certain aspects of the child's inheritance are related to race. From birth he is, in certain respects, like unto a certain number of other persons of the same racial background.⁴

We shall sketch five racial factors associated with heredity: (1) physical stature; (2) shape of head; (3) physiognomy; (4) hair; and (5) temperament.

Physical stature. There is a general, but not invariable, connection between race and stature. That race does not absolutely fix stature can be judged from the fact that certain members of a race may resemble in stature members of another race more than they do their own. Yet members of a race on the

³Cf. Groves, E. R., *Personality and Social Adjustment*, Longmans, Green, New York, 1931, p. 27.

⁴For a general understanding of racial backgrounds, the student should consult a standard work, such as Kroeber, A. L., *Anthropology*, Harcourt, Brace, New York, 1923.

whole do resemble one another. Thus the Japanese as a group are short of height, whereas the Scandinavians are tall. A child born to the pygmy people of Africa, the Negritos, will inherit a dwarfed skeleton. Height, however, is not the only aspect of stature. There is, besides, the matter of body proportion. Thus the Japanese, when seated, appear to be as tall as Caucasians; actually, when standing, they are shorter. This difference may be explained by the fact that the Japanese have as long torsos as Caucasians, but are smaller from the waist down.

Heredity does not, however, determine stature rigidly. There is considerable evidence to the effect that environmental conditions may produce signal changes in height and proportion. It has been observed by some research students, for example, that the Japanese on the Pacific Coast are on the average taller than the Japanese in Japan.⁵ Boas found the same to be true for the second generation of American-born children of European immigrants. Apparently certain factors, such as climate and diet, play a part in fixing body-build. Within recent years, the rôle of the pituitary gland in regulating height has been appreciated. It is known that malfunctioning of this gland, located at the base of the brain, will often play havoc with the growth of the bones of the skeleton.

Shape of head and physiognomy. The influence of race in shaping the head of the child is easily observable. If we look down from above upon the head of a typical Negro, we find it to be long and narrow. The Chinese head, on the contrary, is rather round. Physiognomy likewise has its basis in race. We identify the Jew by his aquiline nose and the Negro by his thick lips. Each race has its characteristic features, which the children of that stock tend to take on. In respect to eye-shape and eye-color, the same is true. The Norse child is likely to be blue-eyed and the Spanish infant brown-eyed. Their eyes will probably be alike in shape, but they will be, in turn, markedly different from those of the Korean baby, who shows the almond-shaped eye. In addition to these distinctions, there are the obvious racial differences in color of skin: yellow, white, black, brown, and red. It is interesting to take note, besides, of the

⁵Rand, W., Sweeney, M., and Vincent, E. L., *Growth and Development of the Young Child*, Saunders, Philadelphia, 1930, p. 94.

various shades of the same hue which exist. The Swedish child and the Italian child are both white, but heredity has even here made a marked distinction.

Hair. Hair as a racial heritage is separated out for special attention because of its importance as a scientific determinant of race. Of all the tests employed by the anthropologists to identify and distinguish races, the hair-test is the most reliable. As Dr. C. M. Case has put it, in levity, "Race distinctions hang by a hair." *Color* is one criterion by which we go. A picture of a typical Dutch child will represent him as being blond, while that of an Italian child will show him to be brunette. Besides color of hair, and even more noteworthy from a racial standpoint, the child receives from his own people a certain hair *texture*. The Eskimo child has hair that is straight; the hair of the Italian child folds about his head in curls; and the hair of the Negro child is gathered in kinky clusters. We have here a single example of each of the three basic kinds of hair which are characteristic of certain races, and which are transmitted through biological heredity: the *straight* hair of the Mongolian peoples, the *wavy* hair of the Caucasians, and the *kinky* hair of the Negroid stocks.

All of these specific physical characteristics (stature, shape of head, physiognomy, color and shape of eye, color and kind of hair) are transmitted from parents to children in accordance with the Mendelian laws of inheritance. These are three: the law of unit characters, the law of dominance, and the law of segregation. The first holds that the items of inheritance (for example, color of eye) are whole units, not capable of division; the second asserts that one character or trait will prevail over another when the parents contribute an inheritance that has conflicting characters; and the third declares that the individual unit characters, though they may come from a hybrid parent, remain forever pristine and uninfluenced by the hybrid parentage. The first of these principles is important because it points out the significant fact that these several human traits we have been considering are inherited as units, the determiners or "seeds" of these patterns being present in the germ plasm. The second principle takes attention on account of its stress of the fact that certain traits are more likely to be inherited than

others. The third makes the commanding claim that the essence of inheritance (these specific traits), although it may appear to be lost in a particular blend, is never actually lost, but only latent.

Temperament. It is now a matter of scientific uncertainty as to whether or not mental traits are inherited, like physical traits, in accordance with the Mendelian principles. It is further not clear if temperament is related to race. There is a tendency to regard temperament as not even an inherited character, but as an established or characteristic mood built up in the life of the child by his experience. However these matters may be, no harm will come from noting the very old connection which has been made between race and temperament.⁶

The traditional classification of temperaments is four-fold: the sanguine, the melancholic, the phlegmatic, and the choleric. Although, as in the matter of physical traits, individuals in a given race do differ widely in respect to temperament, it is thought that the race as a whole exhibits a mood which may be described by one of the adjectives listed above. Thus the typical Negro presents a sanguine mood to the world; he is joyous, light-hearted, and happy. The Slav, on the contrary, is represented as being melancholic; he wears a sad and forlorn aspect, is introspective and depressed of spirit. The Swede is pictured as slow and deliberate, if not sluggish in his reactions. By way of contrast, the Frenchman is distinguished ordinarily by an excitability of nature. If the growing conviction should come to have adequate scientific basis, namely, that temperament is dependent in large measure upon the glands of internal secretion, the popular belief in "racial temperament" may yet prove to be valid.

VI. Sex and Heredity

We have so far considered aspects of the child's inheritance associated with two factors: first, *homo sapiens*, and second, the distinct sub-race to which the child belongs. We are now to ascertain certain aspects of his inheritance which are related to sex.

⁶See Park, R., and Burgess, E. W., *Introduction to the Science of Sociology*, Univ. of Chicago Press, Chicago, 1921: "Temperament, Tradition, and Nationality," p. 135.

Physical sex characteristics. It is customary to classify physical characteristics due to sex as primary and secondary. The *primary* sex characters are those which actually determine for the child what his sex is to be, that is, they are primary in fashioning his sex. They constitute, for each sex, the basic organs of sex, the sex glands and related organs of reproduction. The *secondary* sex characters are those aspects of sex which are secondary in significance. It is during adolescence, when the primary elements of sex have achieved their full maturity, that the secondary aspects come into prominence. The boy's growth includes a beard and the deepening of his voice, while the girl's development includes a rounding out of body form. None of these elements is essential to sex, but they serve to reinforce sex functioning and to make sex difference more distinctive.

In addition, there are a number of physical differences between boys and girls resulting directly from their difference of sex. At any given age, boys will in general exceed girls in respect to height and weight. It is interesting to note, however, that if we ignore age, and compare boys and girls on the basis of height alone, we find them to be about the same in weight. That is, boys and girls of the same height have approximately the same weight. Boys simply grow more. Girls, on the other hand, mature sooner. At any stage of development up to puberty, a girl has achieved a greater proportion of her development than has the boy.⁷ Partly because they do not grow so much, and partly because of initial differences in their sex chromosomes, girls generally are also less susceptible to disease than boys.⁸

Mental sex characteristics. It is easy enough to note difference in physique between the sexes, but what about differences in mental capacity and mental functioning which are due to sex? In the absence of convincing scientific data on this point, it has been argued that the considerable physical distinction between the sexes must have some psychological counterpart. That is, that girls must differ from boys in their mental make-up because they differ in their biology, the idea being that the lat-

⁷Wellman, B. L., "Physical Growth and Motor Development" in *Handbook of Child Psychology*, Edited by Carl Murchison, Clark Univ. Press, Worcester, 1931, p. 249.

⁸Popenoe, P., *The Child's Heredity*, Williams and Wilkins, Baltimore, 1929, p. 123.

ter must influence the former. This kind of reasoning may seem specious yet prove spurious. It is more in accord with scientific thinking to make no distinctions which have not been ascertained by the scientific method.

The available data on this subject are not consistent. We know that girls learn to speak sooner than boys, on the average. Blanton is authority for the observation that "girls begin the process of speaking from about nine to eighteen months; boys, from twelve to eighteen months."⁹ Does this betoken a higher intelligence on the part of girls? But Terman reports there are more mentally superior boys than girls in our public schools.¹⁰ And yet other studies show that mentally deficient boys outnumber feeble-minded girls.¹¹ Again, boys have more social information, but girls have more social tact (they can deal better with social situations which call for discreet handling).¹² Each sex, apparently, is more variable in certain mental traits and at certain age periods.

The facts compel the conclusion that we are not at present in a position to state what, if any, may be the mental accompaniments of sex. In the first place, the data on this point are insufficient; and, in the second place, we are not able to determine just how much of any discernible mental trait in either sex is due to the inheritance of that sex, and how much is due to environmental influences. From the beginning of their experience, we discriminate between the conduct of boys and girls, assigning certain activities and interests to the one sex which we deny to the other. Therefore, when Terman and Lima report that the reading interests of boys and girls differ, that boys prefer stories of adventure while girls take to accounts of domestic life,¹³ we are at a loss to know how much of this tendency to attribute to inherited factors and how much to training. In view of factors such as these, the scientific tendency today is to minimize differences between the sexes in mental traits.

⁹Blanton, S. and M. G., *Child Guidance*, Century, New York, 1927, p. 98.

¹⁰Terman, L. M., *Genetic Studies of Genius*, Vol. I, Stanford Univ. Press, Palo Alto, 1925, p. 54.

¹¹Book, W. F., and Meadows, J. L., "Sex Differences in 5,925 High School Seniors," *Journal of Applied Psychology*, 12:56, February, 1928.

¹²Hunt, T., "Measurement of Social Intelligence," *Journal of Applied Psychology*, 12:317, June, 1928.

¹³*Children's Reading*, Appleton, New York, 1926, Chap. 8.

Thorndike's view is in the ascendancy, that "the average man differs from the average woman far less than many men differ from one another."

VII. Family and Heredity

We come finally to consider certain factors in heredity generally associated with family background. We shall attend to three such familial elements: (1) health, (2) intelligence, and (3) special abilities and disabilities. In any individual case, it is not possible to estimate for how much of the child's inheritance his family may be held accountable, but on the average, Galton's "law of ancestral inheritance" holds: the child's two parents contribute between them one-half of each inherited trait, the four grandparents furnish all together one-quarter of each characteristic, and so on, the various fractions—one-half plus one-fourth plus one-sixteenth—finally totaling one, or the sum of the child's inheritance.¹⁴

Health. The family contributes to the child's health inheritance by providing him with elements of organic strength, or elements of organic weakness, or both.¹⁵ Inherited health liabilities are of two general sorts. First, the child may come into life with certain *organic* weaknesses predisposing him to disease. He is not born with the disease-germ, and therefore he is not suffering from the disease at birth. Instead, he is born with a certain organic weakness which leaves him especially susceptible to the entrance and entrenchment of the germ. Such is frequently the case, for example, with regard to tuberculosis in children. The child is born without the tubercle bacillus, or germ of tuberculosis. He may have acquired from his parents, however, a weakened respiratory system or a small lung area, which renders him susceptible to the attack of the microbe. Apropos of this fact is the present verdict of medical science, that post mortem examination shows virtually all persons at some time in their lives to have been subject to tuberculosis. No one

¹⁴Cf. Conklin, E. G., *Heredity and Environment*, Princeton Univ. Press, Princeton, 1922, p. 77.

¹⁵Musselman, L. K., "Natural Immunity in the Newborn," *American Journal of Obstetrics and Gynecology*, 8:45, 1924.

is free from the germ itself, but only those with weak constitutions or lowered resistance succumb to its inroads. Second, inherited health liabilities may consist of *physical weaknesses of a non-microbial character* which are in themselves disabling, and which parents transmit to their children in accordance with the Mendelian laws. Such limiting conditions of health include, for example, *ichthyosis*, or scaly-skin, *diabetes insipidus*, or excessive secretion of urine, *night blindness*, and *hemophilia*, or excessive bleeding on small provocation.¹⁶ Undue bleeding is closely related to the malfunctioning of the parathyroid glands, and specifically to a deficiency in the calcium-forming function of these glands. Besides such physical liabilities the child may inherit some sort of instability of the nervous system which disposes him to mental disease. For example, *Huntington's Chorea* results from inherited degeneration of a part of the nervous system, and various types of epilepsy are related to inherent malfunctioning of this same system.¹⁷

Intelligence. Children differ in strength of mind just as they vary in strength of body. We appreciate the fact that some children are more capable than others in adjusting to life's demands. Furthermore these manifold differences in intelligence in children are visible at an early age. Thus infants acquire the ability to turn over on to their backs when they are put into the less comfortable position of lying face downward. But certain children are able to execute this act long before other children. Again, when placed in a prone position, children will try to raise their heads. By the age of four months most children make the effort successfully, but all children do not.¹⁸ The presence of such individual differences in ability so early in life causes us to believe that they have their bases in heredity.¹⁹

Special abilities and disabilities. Because certain talents do not necessarily appear in connection with every well-balanced inheritance, they are designated *special abilities*; and

¹⁶See "Inheritance of Hemophilia," *Journal of Heredity*, 16:28, January, 1925.

¹⁷Brain, W. R., "The Inheritance of Epilepsy," *Quarterly Journal of Medicine*, 19:299, April, 1926.

¹⁸Gesell, A., *Mental Growth of the Pre-School Child*, Macmillan, New York, 1925, p. 378.

¹⁹The question of the child's intelligence receives fuller treatment in Chap. V: "The Mental Development of the Child."

because the absence of certain capacities is not invariably coupled with a uniformly inferior inheritance, the absence of these powers is known as *special disabilities*. Of both special aptitudes and special deficiencies there are many. We shall instance just a few. The field of mathematics appears to be one for which special expertness is granted some children by their inheritance, and denied to others. There are cases of children who lack general good intelligence, but who show amazing skill in mathematical performance. These are the "lightning calculators." Then there are children who do well in everything else but who fail miserably in attempts at mathematics. They are lacking in the capacity to deal with abstract symbols. Performance of children at spelling likewise reveals marked abilities and disabilities. We occasionally meet people in high places who abominate spelling; they have been able to master other scholastic requirements, but not the proper spelling of words. In the same manner, reading constitutes a unique talent for some children; others, normally endowed in other respects, labor a lifetime against an inherited inability to read with effectiveness. Special aptitudes in music are common, as are special deficiencies too. In the realms of motor coördination and mechanical dexterity, inheritance likewise confers boons upon some and burdens upon others.

VIII. Conclusion

We have in the above discussion not an exhaustive but a representative survey of the heredity of the child. It would be unfortunate if the student were to regard it as in any sense a final or complete presentation. Our treatment of heredity should prove sufficient, however, to establish two things: first, the wide range of the various inherited factors, and second, the vast scope of the sources from which these heritable factors spring.

IX. Subsequent Discussion

The child inherits and he acquires; he is born and he develops. Having reviewed the scope of his native self, we are now in position to observe how he grows. We shall proceed to

an examination of the various aspects of his development, beginning with the physical.

READINGS

1. Blakeslee, A. F., "Heredity and Environment," *Scientific Monthly*, 31:556, December, 1930.
(What future for the Lindbergh baby does this scientist predict? Explain: "In no kind of tree could two leaves be found which were exactly alike." Also: "We start life like a photographic plate which has been exposed." Is the latter a good analogy?)
2. Boas, F., "Family Traits as Determined by Heredity and Environment," *National Academy of Science Proceedings*, 14:496, June, 1928.
(What family traits does he consider? What new evidence does he bring to bear in support of the effects of environment?)
3. Chapin, H. D., *Heredity and Child Culture*, Dutton, New York, 1928.
(Chap. II: "Organic Inheritance"—What content of inheritance does this chapter provide? What does it add to your thinking?)
4. Conn, H. W., *Social Heredity and Social Evolution*, Abingdon Press, New York, 1914.
(Chap. XII: "The Laws Controlling Human Social Heredity and Evolution," p. 305—How does Conn support this statement: "Organic heredity simply gives us certain powers, while social heredity determines what we shall do with those powers"? Explain: "Human evolution has thus been a double one.")
5. Downing, E. R., *Elementary Eugenics*, University of Chicago Press, Chicago, 1928.
(Chap. VIII: "The Inheritance of Human Characters, Physical and Mental"—What is the significance of the family trees provided here? Do you think that the success of Peter the Great is adequately accounted for?)
6. East, E. M., "Inheritance of Mental Characteristics," *Mental Hygiene*, 15:45, January, 1931.
(In what regards does East's conception differ from your own?)

7. Freeman, F. N., "Intelligence Tests in the Nature-Nurture Controversy," *School and Society*, 30:830, December 21, 1929.
(How does Freeman reconcile nature and nurture? On what evidence does he hold that "about 17% of the variability of intelligence is due to differences in home environment"?)
8. Hicks, J. A., "What Science Is Finding Out About Children," *Parents' Magazine*, VI:18, February, 1931.
(Draw up a brief outline of the evidence the writer marshals to indicate the relative importance of heredity and environment.)
9. Jennings, H. S., *Biological Basis of Human Nature*, Norton, New York, 1930.
(Chap. VI: "The Relative Importance of Heredity [Genes] and Environment"—What determines eye-color in man? Why study "identical twins"?)
(Chap. VII: "Genes and Environment in Relation to the Mind," p. 152—What kinds of mental differences are due to environment?)
10. Jennings, H. S., "How Heredity Affects Personality," *Parents' Magazine*, 6:17, April, 1931.
(Outline this discussion. Explain: "Each person is double with respect to his genes." Of what significance is this fact?)
11. Jennings, H. S., "Nature and Nurture," *Survey*, 66:7, April 1, 1931.
(According to Jennings, what are the rôles of nature and nurture? How does a study of identical twins sustain this position?)
12. Jennings, H. S., *Prometheus*, Dutton, New York, 1927.
(“Anything whatever that happens in any object has to be accounted for by taking into consideration both these things: its material of composition and the conditions under which it is found.” Explain.)
13. Popenoe, P., and Johnson, R. H., *Applied Eugenics*, Macmillan, New York, 1926.
(Read any one of the first five chapters. Indicate the major additions it makes to your understanding of the subject. Do you agree with the concluding sentence of Chap. I?)
14. Shull, A. F., *Heredity*, McGraw-Hill, New York, 1926.
(Chap. XXV: "The Eugenics Movement"—What is the eugenics problem? What is the eugenics program? What are its strengths and weaknesses?)

15. Shaffer, E. T. H., "Heredity," *Atlantic Monthly*, 144:349, September, 1929.
(Why is this description of an isolated mountain family entitled "Heredity"? Do you think this title is appropriate? Why?)
16. Swift, E. J., *The Psychology of Childhood*, Appleton, New York, 1930.
(Chap. XIX: "Nature and Nurture"—What contribution is allotted to each? Which receives first emphasis?)
17. Valentine, P. F., "Beyond Heredity and Environment," *Education*, 50:65, October, 1929.
(How does this writer "question the validity of the . . . heredity-environment dichotomy"? How can intelligence transcend both?)
18. Walter, H. E., *Genetics*, Macmillan, New York, 1925.
(Chap. XIV: "The Application to Man"—What experiments in human heredity are recounted? What hereditary defects listed? How may these be controlled?)
19. Witty, P. A., and Lehman, H. C., "Dogma and Biology of Human Inheritance," *American Journal of Sociology*, 35:548, January, 1930.
(How do these writers distinguish scientific from unscientific knowledge of human heredity? How much scientific knowledge is now available in this field, in the view of the writers?)
20. Wodehouse, H. M., "What Does Heredity Do?" *Fortnightly*, 134: 784, December, 1930.
(What rôle does the writer assign to heredity? How does this compare with the rôle assigned to it by Jennings? By any other one writer in the field of inheritance?)

CHAPTER IV

THE PHYSICAL DEVELOPMENT OF THE CHILD

"The eye—it cannot choose but see;
We cannot bid the ear be still;
Our bodies feel, where'er they be,
Against or with our will."

—WORDSWORTH

I. Introduction

In this chapter, we shall consider three things about the child and his physical development. First, we shall view in a general way the bearing of physical development upon personality and behavior. When we shall have seen the general importance of the child's physical life for his mental and social experience, we shall, second, consider certain aspects of normal physical development. How, for example, does the child's body grow when its growth is normal? What are the tests of normal growth? When we shall have seen how the child's body should grow and function, we shall, third and last, observe ways in which abnormal physical functioning affects the child's psychosocial experience. Here we shall examine specifically the relation existing between abnormal physical development and personality.

II. Physical Development and Personality

Why discuss the child's *physical* development in a book on the social psychology of the child? What is the relation between these two? The child's physical condition and his mental and emotional states are intimately connected. More is involved in physical development than shape and efficiency of

body; but even these factors have psycho-social implications. The work and play of a child whose body is mis-shapen, or whose health is impaired, may be variously affected thereby. But the functioning of the child's nervous system influences his conduct more especially. The workings of his nervous system as a whole, and of his brain in particular, are of moment for his behavior.

In what way are body and mind related? The connection between the two is not always a causal one. There is not always a physiological basis for changes in the conduct of a child. Personality may be vastly modified without any inducement from biology. Likewise there may be physiological changes in the child without personality disturbance. Whether or not a physiological condition is directly responsible for a certain aspect of the child's mental life must in each particular case be determined. There is no *necessary* causal relation. But there is always connection between the two, even when no causation is involved. "There is no psychosis without neurosis," no sensation without stimulation.

There are two ways whereby the child's physical nature may affect his psycho-social outlook: (1) maturation and (2) malfunctioning. By maturation is meant the natural growth of the physical organism. In the child's body are elements of growth which do not come entirely into their own at birth. They require time for their full unfolding.

Effects of maturation. The influence exerted upon the child's behavior by the normal growth of his body can be shown by reference to the maturation of his brain. The new-born babe's brain contains from the outset all the cells it ever will have. But the brain itself will grow in both size and weight. Barring accident, it will undergo normal maturation. At birth the child's brain has only one-fifth of its future weight and only one-half of its ultimate size. At the end of the second year, its weight is about two-thirds of what it will be eventually. At six years it is about 90 per cent of the adult's. It increases in size and weight up to about the child's twelfth year; thereafter any development it experiences is along the line of function.¹ Now,

¹Gf. Shaw, H. L. K., *The Young Child's Health*, Funk & Wagnalls, New York, 1924, pp. 4 ff.; Lucas, W. P., *The Health of the Runabout Child*, Macmillan, New York, 1923.

along with the normal maturation of the brain and the central nervous system there will come various changes in the child's psycho-social experience. When his brain is undeveloped, so too is his thinking. This is not to say that the development of thought in the growing child keeps precise pace with the physiological maturation of his brain. This does mean, however, that his thinking is intimately related to his brain growth. As Terman suggests, it may yet be found true that mental development and growth of cortical cells are positively related in a high degree.² However this may be, the dependence of thought upon brain development is clear. When we say of an older, backward child, that he has "the mentality of a two-year-old" we indicate the bearing which physical development has upon mental life.

Similarly the child's social development rests in certain ways upon his physical development. The child's use of language affords a good example in point. His social experience depends significantly upon his command of language. Yet his speech, in turn, is tied up with the maturation of his vocal apparatus and his central nervous system.

Probably at no other time is the relation between the child's organism and his psycho-social disposition so manifest as it is at adolescence. The body-changes associated with the advent of physical maturity are striking. But no less marked are the attending changes in the behavior of the child. He comes into his own physically; and he tries also to come into his own as a person.

Effects of malfunctioning. Maturation of the child's body is only half his physical development, of which the other half is the *condition* of his body as it matures. Defect and disease have often the power to modify his psycho-social behavior. Let us utilize again the child's brain in illustration of this fact. We have seen that the fulfillment of the child's thought life is dependent upon the normal maturation of his brain. But impairment of the brain, even after it has attained to its full growth, may affect the child's thought and conduct. Later we shall consider certain accidents to the nervous system which have disastrous effect upon personality. Here it is necessary

²East, E. M., ed., *Biology in Human Affairs*, McGraw-Hill, New York, 1931, p. 117.

only to observe the general fact that the child's disposition often changes with his departures from good health. A serious skull-fracture, for example, which involves the destruction of cortical cells, may leave him mentally defective. Even so common a state as fatigue may not be without its influence upon his thoughts and feelings. No one will deny that the child when he is weary behaves differently from what he does when he is rested.

III. Normal Physical Development

We have already recognized normal physical development as having two aspects: growth and condition. In section V of this chapter we are to see how abnormal development in either particular may have adverse effect upon the child's personality. As a basis for this discussion it behooves us first to picture the normal growth and functioning of the child's body.

Growth at birth. Very near the beginning of the first chapter of that admirable book, *Growing Up* by De Schweinitz, there is a drawing consisting of a solid black rectangle with a white dot the size of a pin-point at the center. The legend reads: "The little white spot on this page is ten times larger than the egg from which you started growing." Nothing in all nature is more marvelous and mysterious than this, that in this tiny speck of life, too small for the unassisted human eye to see, there lives the essence of the fully developed man that is to be. Here we have the staggering scope of man's full physical development, from the dot to the adult. We have here, obviously, a rate of growth that is prodigious. We underestimate this development when we say, for example, that the child at birth has already passed through a millionfold growth. Great as are the physical changes which will occur in the child from the time he is born until the age of his maturity, they do not begin to compare in extent with the physical changes that have taken place between the time of conception and the time of birth. It is a strange and striking fact that most of the child's growth has already taken place when he is born.

Growth from birth to maturity. From the time of its birth to the time of its maturity the child's body undergoes significant modifications of growth. The scope of the changes that take

place appears if we set side by side sketches drawn to scale of a new-born babe and a physiologically-mature man. Of course we shall observe at once that their bodies differ as to size. But what other contrasts appear?³

The several members of the child's body do not bear the same relation to one another that the man's do. Taking our notice first of all is the disproportionate size of the babe's head. It bulks large; we say he is "mostly head." Its circumference measures in excess of the circumference of his chest, at the nipples. Its relative size can be judged from the fact that, in proportion to the rest of the body, the babe's head is twice as big as the adult's. In this large head appears a small face. It gives the appearance of being short and broad, on account of the peculiar nature of his physiognomy. For one thing, the babe's jaw is remarkably undeveloped, a feature of his immaturity to which two things contribute materially—his lack of a prominent jaw-tip or chin, and his want of teeth. The appearance of teeth later will help to elongate his face, as will the emergence of a well-defined chin. Now his face is round and on this account his eyes are located in the center portion of his face; with the changes that will occur in his appearance later will go a change in the location of his eyes. When he is an adult, we shall find them placed between the upper and middle thirds of his face. Further contributing to the broad aspect of his countenance is his broad nose and flat nose bridge. Both these features help to reinforce the impression of facial width. Here is the babe, then, as compared to the man he will grow up to be: big-headed, and mostly cranium.

If the head of the babe is twice the relative size of the adult's, it follows that the rest of the child's body must be proportionately smaller. The large head of the child rests upon a very short neck below which appears a narrow chest. In proportion to the rest of his body the child's chest is as long as the adult's. It is in respect to the length of his arms and legs that the child differs markedly from the grown man. Proportionately, the child's arms are about eight-ninths as long as

³Cf. Inskeep, A. D., *Child Adjustment in Relation to Growth and Development*, Appleton, New York, 1930, Chap. I; Faegre, M. L., and Anderson, J. E., *Child Care and Training*, Univ. of Minnesota Press, Minneapolis, 1929, Chap. II.

the adult's, but his legs are only three-fourths as long. In a word, the child is a top-heavy creature. He will spend his years growing legs for the most part. Relatively, his head will grow least of all, his chest and torso will grow slowly, his arms will account for a greater amount of his growth, and his legs for most of it. A child's growth consists for the most part, therefore, of the lengthening of his arms and legs.

It is interesting to note, also, that the child's growth is not uniform throughout the years; rather, certain portions of his body grow more at certain times than they do at others. The several bodily proportions established at birth will be maintained until the child is six months of age. From this time on until puberty his limbs will grow fastest, his trunk slower, and his head slowest of all. After puberty any increased growth which the child may experience is likely to consist of an elongation of his trunk.

Principles of growth. The growth of the child is a variable affair about which the following generalizations are in order.

1. *Each physical trait has its own rate of growth.* It is true that growth in any one trait is related in a positive way to all the other traits, but the degree of relationship varies for the several traits. For example, there is a high degree of correspondence between growth of height in children and increases in the width of their hips. As between growth in height or weight, and breathing capacity, however, there is little correspondence.

2. *Growth in any one physical trait need not be even or uniform.* At the age of three, a child is on the average somewhat less than twice as tall as he was at birth, whereas at six years of age he will be only about one and one-sixth times as tall as he was at three. As regards his weight, on the other hand, a three-year-old will be about three times as heavy as he was when he was born, and only one and one-third times as heavy at six years as he was at three. Again, in regard to his development of bone structure, a three-year-old child will show about one-third the carpal-bone area of a six-year-old, and but a very small percentage of the bone growth of a sixteen-year-old child.

The practical implications of these principles are at least two: first, those who have to deal with the growing child must not expect him to grow in all respects at a uniform rate; second,

neither should they look for steady and even development in any one trait. The important thing is for the child to grow, in his own way, an attractive, properly-proportioned body.

3. *Maximum physical growth is not necessarily the end to be desired.* To those who are eager that the child attain the full measure of his physical development, it needs to be indicated that complete growth and optimum growth are not always the same. Our goal for the child is not growth alone, but such growth as is consistent with health. Thus a child may have it within him to become very tall, but in sprouting to a considerable height, he may weaken his physical resources. In this case, it would be better for the child not to grow to his capacity. Health thus becomes the measure of desirable body proportions and not any arbitrary number of pounds or inches. If it were within the power of a child to achieve an intelligence quotient higher than any which had been attained before, we should encourage him to do so; but we should hesitate to aid any child in his movement towards a new weight or height record. Indeed, in addition to the scientific view that desirable growth is healthy growth, society penalizes maximum body growth as a result of her social preferences. For example, Pullman sleepers are constructed on the principle that moderate growth is socially more desirable than maximum development; a person who measures more than six feet tall is certain to have this fact painfully impressed upon him.

4. *Physical growth is essentially an individual matter.* In this time of norms and indices and charts, by which the growth of children is judged, it is well to observe that physical development is in the end an individual matter. We must recognize individual differences in body growth as we do in mental unfolding. When we assume this position we come face to face with the fact that children of the same age differ in their physical development; children of the same chronological age are not all of the same physiological age. Chronology and physiology do not necessarily go together. Wide differences in physical measurements may be found among children of the same age, and all of these children be normal in their development. In the words of Wellman: "A boy or girl may be twice as heavy and half

again as tall as another boy or girl of the same age and yet be apparently within the normal limits of growth.⁴

As a consequence of the fact that there are differences, and sometimes considerable differences, in the physical growth of individual children, which growth is at the same time perfectly normal growth, it is necessary that each child's physical progress be judged in terms of itself. Those who guide individual children tend to refer the physical development of these children to group averages; they constantly compare *this* child with other children. This is all to the good, if the individual nature of child growth is also noted. "In the last analysis," say Baldwin and Stecher, "problems of growth are largely individual problems."⁵ The best test of a child's physical growth is to be found, not in comparison of his performance with that of other children, but in the nature of his own performance. Individual growth charts are indispensable, and the valid criterion for child development becomes one of internal consistency.

Indices of growth. With these considerations in mind, how can the child's body growth be appraised? By what precise means can we tell if it is normal and proper?

It would be well if there were available a single index for physical growth as a whole. In the mental field such a criterion of total development is found in the intelligence quotient, or I.Q. index. By means of a single number, we are enabled to have knowledge of the intellectual status of the child. In the realm of physical growth, however, there is at the present time no single index comparable to the intelligence quotient. As a consequence, no single item of measurement can serve well as an indication of physical maturation. Naturally, the next best thing is to use a combination of tests. This has become the established practice. Without a doubt the two items most commonly selected as the basis for indices of physical maturation

⁴Wellman, B. L., "Physical Growth and Motor Development and Their Relation to Mental Development in Children," in *Handbook of Child Psychology*, Edited by Carl Murchison, Clark Univ. Press, Worcester, 1931, p. 244.

⁵Baldwin, B. T., and Stecher, L. I., *The Psychology of the Pre-School Child*, Appleton, New York, 1924, p. 37. For convincing statement and support of this view see also Kugelmass, L. N., "Dynamics of Growth," *Child Study*, 10:101, January, 1933.
 National Institute of Education

are height and weight, these items being selected on account of the comparative ease with which they may be secured and the relative accuracy with which they reflect the total growth experience of the child. To be sure, the greater the number of traits which are considered in the evaluation of the child's growth, the more accurate will be the judgment upon it, but experience has found that if height and weight are regarded together, they serve well as a general growth index. Either, when used by itself, will not be very serviceable; but the problem of variability is met in a great measure by basing the norms of development upon these two variables of age.⁶

In addition to this index, however, and serving as an invaluable check upon it is the index of calcification or bone-growth. The height-weight status of the child, on the one hand, and the child's anatomical status, on the other, provide us with a serviceable cross-section of the degree of his physical maturation. The index of anatomical age is based upon the stage of ossification of the carpal bones of the wrist. By means of radiographs the degree of development of these bones may be determined. The child's anatomical age is estimated by dividing the sum of the measurements of all the carpal bones present by the width of the wrist between the points designated.⁷

Further, the growth-condition of the child's teeth is frequently considered along with the development of his bone structure. As far back as the fifth month before the birth of a child the rudiments of teeth have been massing in his jaw, and at birth he shows the cusps of the twenty "milk teeth" that he is soon to carry. But, however much activity is in progress beneath the surface, the teeth themselves will appear only at certain intervals, thus demonstrating the cyclic character of their growth. The manner in which a child's teeth grow we now know to constitute a good index of his general physical maturation on the one hand, and his state of health on the other.⁸

⁶For representative tables and charts, see Anderson, J. E., and Goodenough, F. L., *Modern Baby Book and Child Development Record*, Norton, New York, 1929, pp. 46 ff.

⁷For a discussion of anatomical age, see Thomas, W. I. and D. S., *The Child in America*, Knopf, New York, 1928, p. 497.

⁸For dentition tables, see Bean, R. B., "The Eruption of the Teeth as a Physiological Standard for Testing Development," *Pedagogical Seminary*, 21:596, December, 1914.

IV. Normal Physical Functioning

The child's nervous system. We have so far seen how the child's body normally grows; now we are ready to observe how it normally functions. The child's physical constitution is an organic whole and acts as a unit. Every part of his physical organism contributes to the welfare of the whole. But one part of his make-up in particular has special relation to his psychosocial experience. This is the nervous system. It stands, to use a term proposed by C. M. Child, in a position of *dominance* with reference to the other equipment of the body.⁹ It is truly the physical basis of behavior. On this account it merits special description, even though it be brief and simple.

The reflex arc. Evidence of the working of the child's nervous system is manifold. Its simplest action is the reflex arc, of which all other nervous phenomena are but elaborations. The reflex arc may be illustrated by the example of the child who withdraws his hand upon touching a hot stove. His behavior involves six constituents: (1) the *stimulus*, namely the hot surface, which excites (2) the sense organs of the skin, called *receptors*, which transmit along (3) the *afferent nervous pathways* the impulse received to (4) the *adjustment center* in the spinal column or cortex, which redirects the impulse over (5) the *efferent nervous pathways*, to (6) the *organs of response*, in this case the muscles of the hand. The child's body thus has the capacity to receive impressions from the outside world and to transform them into vital functions. In the mutation, three things are involved: (1) agencies of impression, (2) agencies of transmission, and (3) agencies of expression. These are the three basic elements of the nervous system and its allies. We shall give brief attention to each.

Organs of reception. The child at birth possesses the entire gamut of sense organs, although certain ones may not as yet be in good working order. He is equipped with the sense organs even when for one cause or another they do not transmit sense impressions effectually. These receptors or agencies of impres-

⁹Child, C. M., *Physiological Foundations of Behavior*, Holt, New York, 1924, p. 34; also Herrick, C. J., *Neurological Foundations of Behavior*, Holt, New York, 1924, p. 255.

sion may be catalogued under seven heads: (1) *Cutaneous*. The surface of the skin contains organs specially sensitive to certain stimuli. Heat, cold, pressure, and pain impressions enter the body through certain skin areas containing the organs appropriate to them. The little child's skin contains the same number of end organs as the adult's. Since, however, he has a much smaller skin area, he is more sensitive to these impressions. (2) *Gustatory*. The organs of taste are connected with the tongue and, in the case of the young child, with the inside cheek area as well. With this auxiliary agency it may well be that the child responds to the four tastes (bitter, sweet, sour, and salt) even more acutely than the adult. We know what great reliance for direction in his experience the young child places upon his sense of taste. (3) *Olfactory*. Likewise the sense of smell is very keen in little children. In the mucous membrane of the nose are the nerve fibres which, when stimulated by gaseous particles, lead to the sensation of smell. (4) *Visual*. The child receives impressions from the outside world through the rods and cones of the retina of the eye. The child's visual sense is probably his weakest. For a time he sees but imperfectly. He lacks power both to focus and to coördinate his vision. But by six months of age he has acquired a fair degree of visual convergence and accommodation. (5) *Auditory*. End organs in the cochlea of the ear help to convert air vibrations into sound sensations. Were it not for mucus naturally present in his ear at birth, the child would hear sound from the outset. As it is, hearing is generally delayed about forty-eight hours until the mucus clears. Soon thereafter the child shows that he is sensitive to differences in the intensity of sounds. (6) *Equilibratory*. Close by the end organ of hearing in the inner ear are the semi-circular canals which help to regulate the sense of balance. With certain changes in the posture of the body the fluid of the canals comes into contact with hair cells located at the end of the canals, in such a way apparently as to register the body-imbalance. The sense of dizziness follows. From the fact that little children like to spin around, to stand on their heads, and to engage in similar unbalancing activity, and from the further fact that they do these things without ill-effect, it seems reasonable to believe that the equilibratory sense is little developed in infancy and

early childhood. (7) *Kinæsthetic* and *Organic*. Finally, we note the sensations involved in the matter of movement. In the child's muscles, tendons, and joints are end organs that relay impulses to the spinal cord, where they are converted into sensations of motion. The viscera also send out sensations; these give the child a sense of inner well-being or a sense of inner tension. The visceral sensations help to determine how the child will feel about himself, that is, they help to establish his mood. The kinæsthetic sensations help to give him control over motion. Walking, for example, is possible because of the sensations which come to the child from the muscles involved in the activity. Unless he can in advance feel what walking is like, he cannot walk. Obviously kinæsthetic and organic sensations have a large part in the little child's life, which is so much given over to movement of one sort and another.

Organs of transmission and control. The receptors we have just recounted are, to use Herriek's phrase, "windows of the mind."¹⁰ They admit the stimuli that come to the human body. They do even more than this, however. They receive diverse stimuli and convert them all into identical impulses. The air vibrations that impinge upon the ear, the light vibrations that strike the eye, the chemical substances that touch the tongue are at once converted by the respective end organs into nervous impulses. This, then, is the action at one end of the reflex arc. At the other, there is the actual response. The child touches the hot stove and he withdraws his hand. Between the stimulus and the response there is the working of the nervous system. The child's nervous system is the mediator of his experience.

What is the nature of the nervous system? It is composed of two grand divisions: (1) the *cerebro-spinal* and (2) the *autonomic*. The former takes charge of impulses that originate in the head, limbs, trunk, and body wall (the *soma*). For the most part it deals with organs under the direct control of the will. The latter takes charge of impulses from the *viscera*, which is the collective name for such internal organs as the stomach, intestines, heart, lungs, and glands. Over such organs as these

¹⁰Child, C. M., *op cit.*, p. 43.

we have no direct control. In other words, the functioning of the autonomic system is involuntary.

The entire nervous system is composed of nerve cells and nerve connections, that is, of *neurones* and *nerve fibres*. How plentifully the nervous system is supplied with these units we may imagine from the presence of more than nine billion neurones in the cortex alone. Furthermore, the neurones are of three kinds: (1) *sensory*, (2) *associatory*, and (3) *motor*. The first kind of cell does nothing but receive the sense impressions intended for it. There are different sensory cells for the various sense organs. The second kind of cell, as its name suggests, unites impulses that belong together, for example the impulses that come to the brain from the sight of a printed page and the desire to read it out loud. The third kind of cell sends out nerve messages to organs of action, for example, the muscles. All three kinds of neurone are to be found in the several units of the nervous system. Though we shall for simplicity's sake make reference only to those located in the cortex, it should be noted that they are not confined to any one division of the nervous system.

(1) *The cerebro-spinal (central) nervous system.* Important constituents of this system are (a) the brain, (b) the thalamus, (c) the medulla oblongata, (d) the cerebellum, and (e) the spinal cord. These organs are named in the order in which they appear in the body, from the brain down. Of all, the brain is the most vital for conduct. It is composed of two cerebral hemispheres, of which the covering surface is called the *cortex*. The cortex is the most important unit of the nervous system. It is the place where all voluntary behavior has its birth. It is the place which makes learning possible. It is the region of integration and modification of impulses. The receptor organs are fixed; they cannot choose the impressions that come to them. Likewise the organs of expression are rigid; they can only discharge the impulse sent to them. Whatsoever freedom exists in the nervous system, exists in the cortex.

In the cortex are to be found the three kinds of neurone described above. Each cluster has its own work to do. Apparently there is some degree of localization of each kind of neurone in the cortex. It appears that there are cortical regions in con-

trol of particular body organs. Injury to a group of cells will in turn impair the functioning of the organ connected with them. For example, the visual area is located at the point of the occipital lobe, the posterior portion of the cerebrum. To it come all visual impressions. Those that call for interpretation of any sort are referred to the adjoining association cells. Injury to these association neurones may lead to loss of the ability to read. The child may continue to "see" the characters on the page, but he cannot make sense out of them. If the motor cells are injured, then the child may continue to have visual impressions but he will not be able to write or speak what he reads. Such malfunctionings as the above are called *aphasias*. When such accidents occur, however, sometimes other neurones can be educated to take over the functions of the injured group. From this fact, and from other evidence as well, it appears that the cortex acts as a whole.

Most sensory impressions on their way to the cortex pass through the *thalamus*. It acts as a kind of clearing house for the cortex, integrating the separate impulses that arrive before allowing them to continue to the brain. The *medulla oblongata* controls visceral functions, and the *cerebellum* close by correlates impulses from the muscles, thus determining their tonus. The *spinal cord* carries out two main services: first, it transmits impulses to and from the brain, and second, it controls impulses itself. Most, but not all, reflexes are mediated from this level.

(2) *The autonomic nervous system.* As the central nervous system is the agency for dealing with impulses that originate for the most part on or near the surface of the body, so the autonomic nervous system is the mechanism of control over impulses arising from the internal organs of the body. The autonomic system consists of ganglia flanking the central nervous system on both sides and extending throughout the viscera. Its function is to provide nerve activity for the viscera. The receptors are imbedded in the muscular and mucous tissue of the internal organs. The organs of response are the smooth muscles of these same bodies. When these muscles are stimulated they undergo changes of posture and tension. Feelings of hunger and nausea, for example, result from such postural and tensional change.

The autonomic system belies its name, for it is not an independent affair. It is connected with the central nervous system at every level. The receptors and the effectors of the autonomic division are truly located in the viscera, as we have seen, but the central neurones of the autonomic are located in the cerebro-spinal system. Thus the two are but units of a single system and function together. Take, for example, such an experience as intense fright which a child may have. Say the bark of a dog startles him. What happens? There will be movement of the child's limbs. Depending upon how the child's cortex functions during the crisis, his leg muscles will stiffen so the child cannot move, or the muscles will be actuated so the child can retreat post haste. Along with the movement comes emotion, contributed by the sympathetic branch of the autonomic nervous system. Among other things, the child's heart will beat more rapidly, his breathing will quicken, his digestive processes will be retarded. He will experience the peculiar emotion called fear, involving both feeling and action.

Organs of response. We have already shown how the central portion of the nervous system dispatches impulses to organs that convert the impulses into action of some sort. These organs of response are of four large sorts: (1) *smooth muscles*, (2) *striped muscles*, (3) *duct glands*, and (4) *ductless glands*. Smooth muscles are those connected with the internal or visceral organs. The smooth muscles of the intestines, for example, help to control digestion. The smooth muscles of the heart and arteries regulate the circulation of the blood. As we have said, these muscles are not subject to direct control. The striped muscles are the more familiar skeleton muscles, those used in such large movements as walking and lifting. The duct glands facilitate such processes as digestion and elimination. The relation of the salivary and gastric glands to digestion is a matter of common knowledge. The working of ductless glands is not, however, so generally understood. These organs discharge their chemical substances, called *hormones*, directly into the blood stream, and are on this account called ductless. For example, during the emotion of fear the autonomic nervous system stimulates all the ductless glands of the body, but especially the *adrenals*. These adrenal bodies throw a substance known as *adrenalin* into the

blood stream of the child, effecting a number of changes in the body which all together prepare it for extra effort. From the changes which appear in the nature of the child during an experience of great shock we may infer something of the power of the ductless glands over personality. We shall have occasion later to see more precisely the nature of this power.

V. Abnormal Physical Development and Personality

We have seen how behavior is only a function of the body. The child's mind is a function of his brain. Affect his brain and you affect his behavior. The same relation between conduct and physiology may also hold for other organs. But we have seen how the child's nervous system is the chief organic determinant of his conduct. On this account, we shall give primary attention to misfortunes befalling this system in illustration of the effect of abnormal physical development upon personality.

A child's abnormal physical development may affect his personality either directly or indirectly. Certain changes in his body carry with them the power to change his psycho-social experience. A severe blow upon a young child's head may not only impair his anatomy but his mentality also. There is a direct cause and effect relation between the two. On the other hand, the consequences for the child's personality of accident to his body may not be so immediate. If the blow referred to above should miss his head but sever his arm, the situation would be different. Minus an arm, the child would not remain the same sort of child he was before. In certain particulars, he would have to modify his experience, and in turn the modified experiences would reshape in some indeterminate ways his outlook upon life. In this case, accident to his physical development would affect his personality indirectly. We shall devote the rest of this chapter to amplifying the two kinds of influence of abnormal physical development upon personality.

Direct influence of abnormal physical development upon personality. Since the child's body is an organic whole, every part of which is related to every other part, damage at any point in the organism may affect his nervous system. But we

shall here take note of only four important physical channels through which his mind may be directly affected: (1) alteration in the circulation of the blood to the brain, (2) poisoning of the blood, (3) brain injury, and (4) glandular malfunctioning. We shall consider each of these briefly.

(1) *Alteration in the circulation of the blood to the brain.* Since the child's physical organism depends upon his blood stream for nourishment, it is clear that anything which affects the transmission of the blood to his brain will affect his mental functioning. The way in which the blood circulates in the body is described under the term *blood-pressure*. A child with low blood-pressure tends to show sluggish mental activity, while a child whose blood-pressure is high is more likely to be active of mind. Glandular functioning, especially of the thyroid, serves to counteract or intensify the effects of blood-pressure, depending upon the nature of the gland action. The child who is quickly tired by mental exertion when seated at his lessons and who, when he is thus fatigued, finds it satisfying to elevate his feet to the level of the table at which he is working, is probably suffering from low blood-pressure. The importance of the proper movement of the blood to the brain is much more strikingly demonstrated in the case of the complete stoppage of the flow because of blood clot. If brain centers are affected, loss of corresponding functions may follow.

(2) *Poisoning of the blood.* The amount of blood and the way it moves in the body are important for the child's mental health, but the quality of his blood is of moment too. Poisoning of the blood stream may result in serious damage to the brain and nervous system. Such poisoning may be the outcome of a number of the so-called children's diseases. Rheumatism, for example, attacks little children more commonly than is popularly supposed. Rheumatism in turn may lead to encephalitis, a condition of acute inflammation of nervous tissue. When the cortex is affected, chorea (St. Vitus' Dance) often follows. Meningitis, when unchecked, may cause deterioration of brain cells, thus producing feeble-mindedness in the child. Of all the poisoners of the blood, syphilis is the most notorious. When it attacks the nerve centers of a child's brain, it produces the condition known as juvenile paresis. These diseases mentioned

above are among the more common enemies of the nervous system. But almost any disease can so poison the blood as to lead to mental malfunctioning. The delirium of typhoid patients is a case in point, and not a few medical men trace the chronic elation of the tubercular child to the same source.

(3) *Brain injury.* Mechanical injury to the child's brain (or spinal cord) may also have disastrous effect upon his personality. Undue pressure upon the brain caused by a growth (tumorous) may lead to serious mental consequences. Sustained and severe pressure upon the babe's head at the time of birth may result in his being made mentally deficient through the crushing of his cortical cells.¹¹ The same mental condition may follow from the accumulation of cerebro-spinal fluid in the ventricles of the brain, a condition called *hydrocephalus*. Again, a severe blow upon the head or spinal column, sufficient to cause fracture or hemorrhage, carries the possibility of derangement of the nervous system.

(4) *Glandular malfunctioning.* Lately, biological science has been almost revolutionized by the discovery of the effects of the ductless or endocrine glands upon personality. Much less is known about certain ones of these glands than about others. About the *thymus* and *pineal* glands science has as yet little definite knowledge. The thymus gland is in the chest, astride the windpipe and overlapping the base of the heart. The pineal gland is well protected in the center of the brain. Both are thought to be glands of childhood, for their influence normally ceases by the time of adolescence. Their main purpose seems to be the regulation of the child's sexual development. Should, for example, the child's thymus gland increase rather than decrease in size as he grows older, he may take on certain of the aspects of the opposite sex.¹²

The action of the other ductless glands is better understood. The thyroid glands, one on each side of the windpipe, regulate the child's metabolism. If he has too little thyroid secretion, he may become a *cretin*, short in height and deficient in mind. If he has an excess of thyroid substance he will be

¹¹Hollingworth, L. S., *The Psychology of Subnormal Children*, Macmillan, New York, 1924, p. 249.

¹²Berman, L., *The Personal Equation*, Century, New York, 1925, p. 129.

hyper-active, fretful, and emotional. Close by the thyroids are the *parathyroids*, four in number. They too have bearing upon the child's personality. Lack of the hormone of these glands in sufficient amount induces a nervous trouble known as *tetany*. In instances not so extreme it makes for the peculiar ability to visualize things very clearly. Those who possess this unusual power of visual recall have been termed *eidetic* children.¹³ So too the other ductless glands have peculiar power over the child's mental and emotional life. The *pituitary* gland, located at the base of the brain, has an anterior portion that secretes a hormone essential to life. An undersupply of this hormone in children may lead to persistent infantilism. Joe, the fat boy of the *Pickwick Papers*, is the type. The *adrenals*, located one over each kidney, augment the thyroids in supplying the child with energy. A deficiency of adrenalin may leave a child neurasthenic; an excess may produce chronic exhaustion. The adrenal glands normally function with special vigor during times of emotional stress, such as fear and anger, at which times they supply the child with additional energy with which to meet the challenge at hand. Finally, the importance of the *gonads* or sex glands for the child's personality is manifest. Deficiency here means lack of sex virility and docility generally. The sex glands are responsible for the physical changes occurring in the boy and girl at adolescence. The mental and social concomitants of these physical changes are as striking as they are significant.

Indirect influence of abnormal physical development upon personality. We have so far examined personality effects in children which have a primarily physical cause. We have still to see personality influences which only secondarily trace back to a physical basis. In these latter cases, the child is in some particular not normal physically, but his abnormality does not of itself make for the changes in his personality. It is his emotional reaction to his physical condition that is primarily responsible for his changed personality. Alfred Adler noted this in connection with his observations on the inferiority complex.¹⁴

Adler noticed in the course of his work as a physician that patients with inferior physique often show a sense of inferiority

¹³Cf. Jaensch, E. R., *Eidetic Imagery*, Harcourt, Brace, New York, 1930.

¹⁴Adler, A., *Organ Inferiority and Its Psychological Compensation* (Nervous and Mental Disease Monograph Series No. 24), Washington, D. C.

over having it. They are definitely bothered by the physical difference between themselves and their physically normal associates. Just as the human body, when certain parts break down, seeks to compensate for the damage by strengthening other parts, so too Adler observed that individuals with this sense of inferiority seek often to compensate for their feelings of inadequacy. In certain cases the compensation is successful, the individual makes a vigorous "masculine protest"; he asserts himself energetically in a new direction, and gains therefrom a fund of self-satisfaction with which to balance his underlying low estimate of himself. In other cases the individual finds no activity in which he can engage and from which he can derive a measure of self-esteem. He continues to brood over his deficiency, until he develops serious nervous trouble. It is Adler's teaching that neurotics are persons with a chronic sense of inferiority derived from a consciousness of their physical inadequacy. All their conduct may be interpreted as struggle against their own negative self-estimates due to physical deficiencies.

VI. Subsequent Discussion

In this chapter we have seen how the child's physical development is basic to his personality. It is this fundamental and specific importance of the physical organism for the psychosocial life which explains the extensive research, past and present, into the physical aspects of child growth. The present time witnesses, however, a promising application of science to other phases of child nature. We shall occupy ourselves in the next chapter with the topic of "The Mental Development of the Child."

READINGS

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(What has been the effect of the machine age upon the child?)
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(Read any one chapter of this book. In outline form, list the material presented by the writer which is new to you.)

3. Baldwin, B. T., and Stecher, L. I., *The Psychology of the Pre-School Child*, Appleton, New York, 1924.
(Chap. II: "Physical Growth"—What are the several kinds of measurement which are taken at the Iowa Child Welfare Station? In regard to which of these are boys and girls nearly alike?)
4. Boas, F., "Observations on the Growth of Children," *Science*, ns, 72:44, July 11, 1930.
(What groups are studied by this writer? Is their special character of importance? What challenge to the laws of heredity is contained in this study?)
5. Bolt, R. A., "Findings and Recommendations of the Medical Section, White House Conference on Child Health and Protection," *American Journal of Public Health*, 21:571, May, 1931.
(List the findings herein presented. List also the several recommendations. Is there a recommendation for each discovered need, or have some situations been left unprovided for?)
6. Child, C. M., *Physiological Foundations of Behavior*, Holt, New York, 1924.
(Report any two experiments described in this book, in which the physical development of animals was altered by artificial means.)
7. "Development of Children," *Science*, ns, 61: sup. 14, June 5, 1925.
(What do this article and the one listed above by Boas have in common? What points of difference can you indicate?)
8. Furfey, P. H., *The Growing Boy*, Macmillan, New York, 1930.
(Chap. I: "On Growth in General"—"The second striking fact of physical growth is its diversity." Explain.)
9. "How to Recognize Diseases of Children," *Parents' Magazine*, 6:26, October, 1931.
(What specific clues are provided? Are they adequate? Is it sufficient for a parent to be able to detect diseases, or should a parent undertake to prescribe for them as well?)
10. Inskeep, A. L., *Child Adjustment in Relation to Growth and Development*, Appleton, New York, 1930.
(Chap. I: "Adjustment in Relation to Growth in Height and Weight"—What methods of measuring growth are recorded?)

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What periods of growth in height and weight are indicated?
 (Chap. II: "Some Facts that Modify Growth in Height and Weight," p. 37—What are some of these "facts"? How important is proper diet?)
 (Chap. IV: "Handedness and Footedness," p. 94—What is meant by "training the handed hand"? By "the efficient foot"?)

11. Kirkpatrick, E. A., *Fundamentals of Child Study*, Macmillan, New York, 1912.
 (Chap. II: "Physical Growth and Development"—In relation to what factors is growth treated? Of what value is this discussion?)
12. "New Educational Theories and Practices in Connection with the Weighing and Measuring of Children," *Hygeia*, 8:754, August, 1930.
 (Indicate clearly the nature of the difference between the older theories and the newer; between the older practices and the newer.)
13. "Protecting the Child against Infectious Disease," *Hygeia*, 7:167, February, 1929.
 (What specific suggestions does this article supply? How would you compare this article with No. 9 in this same reading list?)
14. Rand, W., Sweeny, M. E., and Vincent, E. L., *Growth and Development of the Young Child*, Saunders, Philadelphia, 1930.
 (Read pp. 203-209, 282-297, 314-327. What is the average weight of the human brain at birth? According to Morgan's study at Merrill-Palmer School, at what season of the year do children grow most? What other findings impress you?)
15. Wile, I. S., *The Challenge of Childhood*, Seltzer, New York, 1925.
 (Div. I: "Physical Problems"—What method does the writer employ in the presentation of his material? Are his cases well-chosen? Do you agree with his conclusions?)

CHAPTER V

THE MENTAL DEVELOPMENT OF THE CHILD

"Mind . . . is the power to understand things in terms of the use made of them."
—DEWEY

I. Introduction

Our attention will be taken in this chapter by five essential matters. First, we shall briefly define the terms of our subject. What do we mean by *mental* and *mental development*? We shall find that there are two aspects to the mind of a child, the motor and the intellectual. To these two phases of the child's mind we shall devote the next two sections of this chapter. That is, we shall, second, consider in detail the nature of the child's *motor activity*, and third the nature of his *intellectual activity*. Fourth, we shall briefly look into the *bases* of mental development in general. Upon what does the child's mental progress depend? Fifth and last, we shall examine existing ways for determining the mental capacity of children. Available *mental tests* will come within our scrutiny.

II. Meaning of Mental Development

Meaning of mind. In the previous chapter on physical development, we saw how the nervous system as a whole determines behavior. We more specifically observed that the nervous system is composed of two main divisions, the cerebro-spinal and the autonomic; furthermore, that each division is in direct charge of certain aspects of the child's experience. The cerebro-spinal division controls the workings of the child's mind; the autonomic division regulates the child's emotions. We are not

here concerned with the latter, since the next chapter is to be given over to the child's emotional development. Our immediate interest is with the child's mental life. In the light of the above discussion, *mind* may be thought of as the functioning of the central nervous system, and even more definitely, as the working of the cortex of the cerebrum. The cortex, in turn, contains two special areas: the innermost infragranular layer which controls instinctive action, and the outer, supragranular layer which controls the higher mental processes, and which develops in human beings with the years.

In terms of the working of the central nervous system, it is thus possible to say that the content of the mind of the human child consists of *action* and of *thought*. The former is generally referred to as motor activity, the latter as intellectual activity. A certain school of psychology, *Behaviorism*, seeks to unify the two by regarding thought as a special phase of action, but we shall find it advantageous for practical purposes to consider these two aspects of mind separately.

Meaning of mental development. If the child's mind is the functioning of his central nervous system, of what does his mental development consist? The smallest unit, the basic unit, of mental functioning is the simple reflex. It comprises a connection in the child's nervous system between a given stimulus and the response to it. Say the child touches a hot stove and, feeling the pain, quickly withdraws his hand. This is a simple reflex action. Say, also that he sees the stove as he touches it. There is then formed in the child's cortex a connection between the cells involved in pain and the cells involved in sight. The association neurones of the brain help to establish the relationship between pain and the hot stove. The child has begun to learn that a hot stove when touched burns the skin and makes for pain. He has learned this by having the original, native reflex tied up with a new, specific situation, the stove. After a few experiences, he will not touch the hot stove. The sight of the heated surface will be sufficient to call up the whole reaction pattern. If, furthermore, his mother says "hot" as he touches the stove, this word too will become linked up to the reflex pattern, so that after a time the mere mention of the word "hot" will suffice to restrain the child from touching an

object. This process whereby a reflex reaction is associated with a new stimulus in such a way that the latter is capable of inducing the original reaction is termed *conditioning*; and the activity so induced is called a *conditioned response*.

Mental development is thus seen to be a matter of cortical connections. It is a matter of the intensification and elaboration of these connections. It involves the strengthening of original neural patterns. To this extent mental development is dependent upon maturation or growth of the nervous system. In addition mental development consists of the making of new associations. A little child enjoying the sound of his own voice makes the reflexive cry: *ma*. He makes the sound and he hears himself making it. He therefore repeats it (*a circular reflex*):¹ *ma-ma*. This is no word, as the baby utters it, only a reflexive sound. But the baby's mother hears it and is delighted. The baby soon realizes that this sound has special significance, for it pleases the adults about him. He realizes, too, that it has special meaning. His mother comes into his presence saying *ma-ma*. His father comes into his presence saying *da-da*. Soon he will use these terms in reference to all adults. The original reflexive sound has become associated in his mind with a certain kind of situation. Later, new associations will be formed, so that he applies these appellations only to his parents. Mental development is a process of *learning*, and learning in turn is a matter of the building up of new connections in the cortex.²

III. Mental Development: Motor Activity

We shall now consider how learning takes place in respect to the two aspects of mind, action and thought. The intellectual activity of the very young child is certainly slight. Many students of childhood doubt that the infant reasons at all. However this may be, there is no questioning the fact that motor activity counts for much more in the life of the young child than does intellectual activity. Motor activity is dominant in the

¹For discussion of the *circular reflex*, see Allport, F. A., *Social Psychology*, Houghton Mifflin, Boston, 1924, p. 39.

²Cf. Wheeler, R. H., and Perkins, F. T., *Principles of Mental Development*, Crowell, New York, 1932, p. 8; also Chap. 7: "Beginnings of Learning in the Child," pp. 122 ff.

child's experience. From the moment of birth the child is an active creature. He is everlastingly doing things, and the term "restless" may be applied to him, without reference to his sex. Observation warrants the belief that at no future time will the child again be so active as he is during the first months of his life. Here is "the strenuous life" which surpasses even that which Roosevelt described. Hence we are justified in considering directly the nature of the child's motor development, leaving the matter of the development of his higher mental processes for later discussion.

Scope of the child's movements. One who watches a very young child in action soon observes two distinct kinds of behavior. Much of the babe's activity appears to be without form or pattern, and is of a spontaneous nature. These acts are known as *random movements*, and are so called because they bear no aspect of consistency. There is no telling what will occur next; there is no definite response to definite stimulation, but simply a state of general activity of the entire body. On the other hand, other elements of the behavior of a young child are seen to be less diffused and indeterminate. Certain acts occur over and over again, in regular fashion; they are specific reactions to concrete stimulations. To them the name *reflexes* is assigned by psychological science. Thus, random movements on the one hand, and specific reflexes on the other, constitute the scope of the young child's behavior.³

There is no difficulty in the way of noting the child's random movements. All of him moves—head, shoulders, torso, arms, fingers, legs, feet, toes. The movement we observe is random, to be sure, for it is designed to achieve no specific purpose; but we should hardly call it purposeless behavior, since it provides the child with abundant exercise which contributes to growth and development. Closer observation shows this random movement to conform to types. There is (1) wriggling; (2) waving; (3) stretching; (4) flexing; and (5) tensing. The child squirms, he moves his arms about, he extends his arms and legs, he folds and unfolds, bends and straightens his jointed limbs. The tensing process is most noticeable in the new-born

³Cf. Blanton, M. G., "The Behavior of the Human Infant During the First Thirty Days of Life," *Psychological Review*, 24:456, 1917.

and very young child and is for the most part confined to his face. There we observe a rhythmic tensing on three levels: eyes, nose, and lips. He alternately knits and relaxes his brow, narrows and opens his eyes; his nostrils contract and extend, as they adjust to the difficult demands of respiration; and his mouth keeps opening and shutting, his tongue protruding fully half an inch and then receding in accompaniment to the mouth-process.

As regards the reflexes, which are distinguished by reason of their specific location in the body and their simple and consistent expression, it is fairly amazing to find that the child possesses at the outset almost the entire stock which appears in the adult. Certain reflexes are located about the child's face: *sucking, swallowing, gasping, yawning, coughing, sneezing, and winking*. Attention to this list compels the observation that the child at birth is provided with such capacities as are essential to his survival. Sucking and swallowing go together to serve the hunger urge. Gasping, yawning, coughing, and sneezing help to sustain normal respiration. Winking is protective of the eyes. In addition to the above coördinations, the new-born babe possesses two reflexes which normally abide but a short time. These temporary devices are the so-called *Babinski* and *Darwinian* reflexes. The first relates to the "fanning" of the child's toes in response to stimulation of the soles of his feet. Not uncommonly this reaction disappears about the sixth month, and in any event has been eliminated in the normal child by the second year. The second reflex (Darwinian) consists of the ability of the babe to grasp things securely with his hands. This response occurs automatically when an object touches the palm. It is fascinating to see a very young child clutch one end of the measuring tape used by his examining physician; and so powerful is his grasp at this tender age, that it is possible to lift him entirely off the ground by raising the other end of the tape. The child should lose this ability, however, by the fourth month.

Developmental trend of the child's movements. From these elementary beginnings, the child progresses in motor activity until he achieves the intricate skills and movements of adulthood. How, precisely, does this progress come to pass? We

have just seen how, at the start of life, we find only *mass* activity and movements that are *uncoordinated*. Studies are on record of the experience of the very young child in learning, for example, the use of the rattle, and these are helpful in showing us along what lines the motor activity of the child develops. At first, many of the child's movements are purposeless; he moves about considerably, but in complete ignorance of objects about him. Such specific, purposeful acts as he does perform are highly uncoordinated, as, for example, his attempts to reach for the rattle which lead to frustration because he cannot direct his hand toward it.

Motor development consists essentially of achievement along two lines: *control* and *coördination*. As regards the first of these, movements which were in the beginning involuntary are made voluntary; that is, they are brought under personal, conscious control. The powerful grasping reflex which the child exhibits so early is an automatic affair. Later, he loses the ability to grip so securely, but he achieves a considerable measure of voluntary control over the act of grasping. As regards his achievement of motor coördination, development depends in the first instance upon increasing control over the separate, individual motor acts. In addition, the child soon learns to couple and relate his activities. He learns not only to see more clearly and to grasp more readily, but he combines the two powers into the fundamental eye-hand coördination. His development here consists in the formation and the perfection of basic coördinations.

The process of motor development. The child achieves control over his movements and he learns to coördinate them into harmonious action. He attains to these ends through three avenues of improvement: (1) general practice; (2) specific practice; and (3) structural maturation.

First, by general practice we mean such exercise of the body as is not directed toward any specific end, but which involves a large part of the organism in general activity. The early random movements of the child come within this category. They are general, in that they point to no specific purpose; but they are nevertheless valuable in increasing the child's motor control and coördination. Accordingly it is important that the child enjoy opportunity for the free movement of his body. He must

have room in which he can squirm and stretch. His crib should be spacious enough to allow for this. Also his clothing should be loosely fitting and unrestrictive. The child should not be coerced into inactivity, but rather encouraged to gain in motor power through the general movements of his limbs.

Second, the child develops motor skills through the practice of individual acts. He singles out special coördinations for his attention, and by repeated endeavor gains in his ability to execute them. Reaching for his rattle, which involves an adjustment of eye and hand, is an example in point. Over and over again he moves his hand out toward it until, by this process of concentrated practice, he achieves a good measure of ability in grasping it. The process itself is essentially one of trial and error. At first he moves toward the rattle not only with his hands but with all of himself, and as a result he may be further removed from the rattle than he was before he sought to reach it. Slowly he learns to eliminate the movements that do not bring success. In his mass efforts to reach the rattle certain movements prove fruitful. One hand, which has been extended outward beyond the other, manages to touch the rattle, and the child experiences the satisfaction of success. Repeated satisfactions of this sort serve to establish the successful process in the child's consciousness, and we say that he has *learned* to reach for the rattle.

Those who have children under their charge need in every way possible to encourage individual, specific practice of this sort. Adults need in the first place an attitude of mind which looks upon such activity as desirable. Otherwise they are quite likely to do too much for the child, and by so doing deprive the child himself of the chance to develop motor skill. It is manifestly unwise to supply the child with the objects he would like to have, if it is possible for him to secure them himself, through a little effort. Again, it is not wise to return too soon to a child a toy which he has dropped. He needs to learn that dropped objects do not return themselves. On the positive side, the child should be stimulated to practice specific movements. This requires, for example, that his guardians supply him with things to reach for. An inflated rubber animal suspended over the child's crib will serve this purpose. Its distance from the

child may well be changed from time to time, to give the child training in the perception of space. In order not to fatigue the child, the toy should be suspended for short periods only. This precaution also prevents his becoming weary of the animal. Obviously, the details of each situation must be adjusted to the requirements of the individual case; and it is therefore sufficient to point out here the need for motor exercise and to leave the details of providing for this need to the child's guardians.

Third, the development of motor skill depends in large measure upon the natural maturing of the child's body. It is perfectly obvious that a certain degree of structural maturation is prerequisite to the performance of certain acts by the child. However well he may be in command of the idea of standing, he can hardly achieve this result if his legs are insufficiently developed. Motor activity thus first of all requires a certain degree of physical development. This indicates how futile it is to try to separate entirely the motor and mental activities of the child from the physical; it also emphasizes the importance of attention to the child's physical well-being, and especially to the healthy growth of his bone structure. A second implication in this relationship is that certain motor skills must await further body growth before they may be achieved. With the development of his body, the child acquires the foundation for new motor activities.

The provinces of motor development. So far we have considered the general outlines of the nature of motor development in the child, and also the ways and means by which this progress is achieved. We are now prepared to examine the actual development itself. Since motor activity is such an intricate matter, and involves so much in the way of behavior that is minute, we shall in the following paragraphs confine our attention to certain of its larger and more vital aspects. First of all, we shall note certain significant provinces of motor activity, and next we shall trace the course of actual motor progress within these fields.⁴

⁴Cf. Rand, W., Sweeny, M. E., and Vincent, E. L., *Growth and Development of the Young Child*, Saunders, Philadelphia, 1930, pp. 184-192, 235-247, 297-302, 327-329; also Wellman, B., "Development of Motor Coordination of Young Children," *Univ. of Iowa Studies in Child Welfare*, 3: No. 4, 1926.

It is helpful as well as interesting to observe that the activity of a child centers about certain of his organs. Two provinces of activity may be distinguished: (1) the use of arms and hands, and (2) the use of legs and feet. First, we have the motor activities associated with *reaching*; second, we have such motor behavior as is connected with *locomotion*. If we direct our interest to these two fields, we shall secure a fair impression of the nature of the child's motor development, and at the same time have our impression of the total process simplified. This we shall next do, but not until we have briefly noted the importance of the *eye* in the development of motor skill in the child.

The strategic rôle which the eye plays in the making of motor adjustments is apparent. From birth onward, progress in point proceeds along two lines: (1) *eye focus* and (2) *eye coördination*. First, there is the necessity of so adjusting the eye upon an object that it yields us a correct impression of that object. Even so late as the third month, the child has poor focusing power. From such evidence as the fact that he attends to approaching persons, we know that he can focus his eyes to see large objects. But the same child will completely ignore a one-inch cube which is placed before him, because he cannot see it. At this tender age, if he drops an object, he shows no signs of missing it. When he is nine months old, he is able to see even the smallest thing. Now he notices pins and particles of dirt; and swallows them, if he is free to do so. Should he now drop a small toy, he knows he has lost it and looks for it. He has progressed in his ability to focus his eyes. At the same time, he learns to coördinate his eyes with his body, and especially with his hands. His ability to take hold of a toy dangling by a string before his eyes depends not only upon his ability to focus his gaze upon the toy but also upon his capacity to direct his hand toward it. This action calls for *eye-hand* coördination. We shall now observe how this coördination comes into its own.

1. The Child's Development of Hand-Power⁶

We shall sketch briefly by age periods the child's advance in control over the use of his hands. The following development

⁶Cf. Gesell, A., *Mental Growth of the Pre-School Child*, Macmillan, New York, 1925, Chap. 8: "Norms of Motor Development," pp. 68-88.

of hand-power represents the progress of the average or normal child over a period of five years.

Three months. At this early age hand coördinations are still rudimentary. For one thing, the young child does not yet take advantage of the fact that he is a human being; that is, he does not use his thumb when grasping and holding objects. Also, his eye-hand coördination is grossly imperfect. If a brightly colored toy is proffered to him, and he wishes to reach it, instead of advancing his hand toward the object, he actually withdraws his hand, such poor coördination does he have between eye and hand. For all this inefficiency, he has already made considerable progress. He now attends to movements of his own body, and especially his hands, with interest. That he has become conscious of his hands, and that he now derives pleasure from their use, there can be no doubt; witness the satisfaction he receives from splashing in the tub, when he is being washed.

Six months. The passage of three months finds the child in possession of an improved hand-control. He still fails to use his thumb in grasping, but he is now able to hold a small object in his hand. He will use his hand as a whole to take hold of a one-inch cube, a process named by Gesell "the palmar scoop." He has advanced to the position where he can use his hand in a variety of ways: he *reaches* for a brightly colored cube, he *grasps* his rattle, he *bangs* his spoon, and he *crumples* paper. The hand-eye coördination has vastly improved. He is able to pick up a pin; and the rudiments of hand-mouth coördination appear in his eagerness to put it into his mouth. Likewise the hand-eye improvement shows in the manner in which he now reaches for an object. All of him still moves forward in the effort to obtain it, but there is progress in the fact that one hand advances ahead of the rest of him. By this age, too, he may consistently use the same hand in reaching out for objects. Gesell reports that 19 per cent of the six-months-old children tested by him showed a preference for one hand, generally the right.

Nine months. What have three more months of life brought to the child in the way of hand-power? Foremost in the changed situation is use of the thumb in grasping. This constitutes a marked advance. It makes possible the extension of holding-power. Not only can more

objects be handled under the new technique, but they can be held more securely. The child is thus able to restore to his mouth the bottle that has slipped out. Now, by means of this new method (which Gesell calls the "pincer technique"), he picks up small objects, like bits of cotton and specks of dirt. The hand-mouth control in many cases has progressed to the point where the child is able to manage a spoon and saucer. An increasing number of children (50-65 per cent) at nine months show a clear preference for one hand over the other, in reaching for objects.

Twelve months. The child's continued progress in control over his hand shows itself, at one year, in his ability to put it to new uses. He can *wave* his hand, in response to "bye-bye." His previous ability to grasp objects develops into *persistent holding*. Thus he can hold a one-inch cube in each hand, and accept a third. He has learned to accommodate his hand to more than one object at a time. He can manipulate a number of things, such as his drinking cup and his cap. By this age he is quite likely to show distinct preference for the use of one hand. Between 65 and 80 per cent of all children at one year discriminate in this way.¹

Eighteen months. Development of hand-control above one year of age consists not so much of the acquisition of new techniques as it does of refinement in use. The child keeps adding to the number of things he can manipulate and the skill with which he can manage them. When he is one and one-half years old he can hold either pencil or crayon in his hand and make scrawls on paper. He can fold a piece of paper once. He possesses enough *steadiness* of hand to string large beads. He manages to use a spoon, with little spilling. He can hold a cloth, and move it about, as if washing or dusting. Beginnings in self-care are made. He is able to wash his hands and face, and to remove his shoes and stockings. Anxious to do even more, he struggles to put on his shoes, but ordinarily this task is too much for him at this time.

Two years. Six months more of life sees a further extension of his ability to manipulate objects, and the bringing of a wider range of things under his control. He is able

¹ Cf. Lippman, H. S., "Certain Behavior Responses in Early Infancy," *Pedagogical Seminary*, 34:424, September, 1927.

to string smaller beads on a thread, using a needle for the purpose. This ability betokens increased muscle and motor control. He can handle a pair of scissors, and with them cut crude holes in paper. He can manage as many as four blocks in building. A valuable index of the child's progress at this time is provided by Gesell, in the form of skill at imitative drawing. At two years the average child can draw a *vertical line* from copy.

Three years. As a basic distinction of the progress during the third year we find that the child achieves the capacity for *elementary self-care*. For instance, he should be able to draw water into the wash bowl, if he is provided with a stool upon which to stand, so that he may reach the faucet. He should be able to perform the usual morning ablutions (lather his hands with soap, wash his face). He can wring out his wash cloth and hang it up to dry. He can undress himself, and in dressing can fasten his front buttons. He has gained enough motor coördination and sense of balance to make it safe for him to carry a small tray; and his fingers are dexterous enough to enable him to use a fork at table. With encouragement and practice, he should be skilled in these matters of self-care by the time he is five years old. Of diagnostic value is the fact that the ordinary child can, at three years, draw both a *circle* and a *horizontal line* from copy.

Four years. In his ability to care for himself, the child advances from an elementary to an intermediate position. He takes the experience of undressing himself as a matter of course, for he can now dress himself if his clothes are simple. He has progressed in the art of self-buttoning, and can manage in difficult places. He is capable of feeding himself at table, except for the cutting and spreading of bread. His building with blocks follows complex designs. He has sufficient motor control to draw a *cross* from copy.

Five years. As we have suggested above, by the time he is five years old a child should be able to take ordinary care of himself. He ought to be able to bathe, dress, and feed himself. Even such difficult motor acts as are required in lacing shoes, in putting on unaided his coat and hat, are not beyond the achievement of the five-year-old. At this age-level, the average child should be able to draw, imitatively, a *triangle* and a *prism*.

2. The Child's Development of Locomotion

Fully as important as the ability to use the hand in a large number of ways is the ability to move about from place to place. We have, therefore, in the development of the power of locomotion one of the most significant and substantial aspects of the child's motor growth. As in the discussion of the child's progress in hand-coördination, we shall trace by age periods the steps in the child's control over the use of his legs and feet.

Four months. It is indeed a far cry from the helpless new-born babe lying flat upon his back to the independent adult, erect of stature and even and firm of stride. When one-third of the first year of life has passed, the child still prefers to lie upon his back. He is still far removed from the ability to transport himself, but he is passing through the initial stages of the process which leads to locomotion. Every movement of his body which is not simply a random movement is a step in that direction. By the time he is four months old, he has achieved a number of specific motion-controls over himself. When placed prone upon his back, he seeks to raise his head above the horizontal plane of the rest of his body. Also, when placed prone upon his stomach, he can lift himself and often sustain himself for an interval by propping his hands up under his chest. He can roll from his side to his back, and vice versa. When carried, he has no difficulty in holding his head erect. If his feet are permitted to touch the floor, while the rest of his body is held securely, he presses his feet downward, making contact with the floor.

Six months. Obvious improvement in the child who is developing normally can be seen within two months. When he is one-half year old, the child can turn himself over from position prone upon his stomach, and vice versa. This represents progress to the extent of one-half turn, for it will be recalled that at four months he could execute only the side-back movement. Now he can sit up, with little support, and indeed prefers to remain in this posture. If held so that his feet are free, he can make stepping movements. More important than all else here, however, is his first real experience in locomotion. The child is able to advance by wriggling, squirming, and hitching on his stomach.

Nine months. It is interesting to observe that the child

gives early indication of the skills which he will later possess. At one age level he can maintain with some assistance a position which at the next level he will be able to assume without help. So at nine months the normal child can sit up, without support. With some assistance, he can stand and make improved stepping movements upon contact of his feet with the floor. This time might well be called the "creeping age," for the child has a number of home-made devices for getting about conveniently. He uses "all fours," and in a variety of ways. Sometimes he scuttles along in a sitting position; sometimes he glides along on one hip, propelled by his hands and the opposite foot.

Twelve months. An advance which the next age period sees is the child's ability to manoeuvre in the vertical plane. When he is one year old he can drop from a standing to a sitting position and draw himself up from a sitting to a standing position. At this time, many children (20-49 per cent) do their first walking, but the achievement at one year is indicative of superior endowment. All children should, however, be able to stand on their feet, with a little assistance; failure to accomplish this is evidence of some sort of deficiency or retardation.

Eighteen months. In this period, for most children (85 per cent and above) the process of motor development culminates in the ability to walk alone. This achievement is a climacteric one in motor progress, for development from now on will consist of the extension and refinement of the walking process. About this time, too, the child will learn to run. The new element of *speed* which is thus introduced requires new motor coordinations. Soon the child will learn also to climb stairs, one foot at a time. He will stand on one foot, in play, and balance himself in his endeavor to mount an inclined plank. All three of these activities introduce still another principle, namely that of *balance*.

From this time until he is about three years of age, the child continues to improve upon his locomotive abilities. The early period is often called the "toddling age," in characterization of the child's movements. Not until he is three years old does the average child develop sufficient steadiness of step to warrant his movements being called "walking." Meantime he is also achieving the complicated motor coordinations involved in jumping, swinging, and riding. At the age of two the child can direct a Kiddy Kar about a

chair. When he is four years old, he has so mastered the fundamental processes of self-movement that we acknowledge him to be capable of self-direction and feel free to send him on simple errands.

Subsequent motor development. These early years witness the growth of the important foundations of the body and the mind of the child; the remaining years are given over to an elaboration and refinement of the tendencies which are set up earlier. This is true of motor development. Upward from the time he is five years old, the child's progress consists in the extension in new directions of fundamental coördinations already established. He learns to manipulate an increasing number of new objects and to manipulate them with increasing skill.

Relation between motor development and intelligence. *Everyday experience* reveals to us that children differ profoundly in the skills they have acquired at a certain age. Some children two and three years of age are not yet able to walk, whereas most children have this ability at eighteen months, and many at twelve months. A few children surprise us by being able to walk, unassisted, at nine months, just half the time required for the rank and file of children. At nine years of age, some children cannot dress themselves, although most children will be able to perform this function fairly well by the time they are five. We cannot deny the existence of wide individual differences in the motor development of children of the same age, but how shall we account for them?

We can say, in the first place, that a child's intelligence has a direct influence upon his motor progress. That is, if a child functions upon a low mental level, his motor development will be retarded. There are available a considerable number of studies which show the feeble-minded child as coming more slowly into possession of the elementary motor acts. The child's instinctive actions are regulated by the infragranular layer of the cortex, but control and coördination are dependent upon the supragranular or outer layer. It is on this account that the bright child develops in motor coördination faster than his backward brother.

However, we need in the second place to be especially careful that we do not reverse the formula. Although it is true that

a superior mind tends to accelerate motor progress and a poor mind to retard it, it is *not necessarily true* that deficiency in motor ability betokens mental deficiency. If *A* learns to walk by the time he is nine months old, he is in all probability a very bright child; but if *A* has passed his second year and still does not walk, we are not justified in concluding that he must be dull. There are factors besides the child's intelligence-level which help to determine his skill at walking. Progress may be hampered by such elements as *poor diet* (lack of milk or other lime-giving substance, leading to soft bones and general poor health), *lack of an adequate setting* (space in which to walk, proper shoes, etc.), *lack of motivation* (making movement unattractive to the child by rewarding inactivity, as through supplying him with objects which he should rather be required to secure for himself), and *emotional upset* (suffering a pain experience on the occasion of his first effort to walk, being humiliated by failure, or limited by fear). The child who would walk in proper season must, to be sure, have the intelligence requisite to the act, but he must besides have sturdy legs to walk with, the necessary equipment for the purpose, much encouragement in the right direction, and a fair measure of the feeling of success in his early endeavors.⁷

IV. Mental Development: Intellectual Activity

What are the intellectual abilities which, along with motor activities, go to make up the child's mental life? They are often referred to as the higher mental processes, the term *higher* being appropriate as a descriptive on two accounts: first, these processes are related to the supragranular layer of the cortex, which is the outermost level; second, these processes count for most in the finer human adjustments and serve to distinguish the mental life of the human being from that of other creatures. The higher mental processes are such as are involved in thinking or reasoning. They include *association* (the relating of cause and effect), *generalization* (the formulation of principles from specific situations), *foresight*, *concentration*, and *recall*. How early and in what guise do these mental processes appear in the life of the child?

⁷Cf. Blanton, S. and M. G., *Child Guidance*, Century, New York, 1927, Chap. 7: "Learning to Walk," pp. 88-93.

Intellectual processes and infancy. Fortunately, there are available a few records of the very early intellectual activity of the child. Mark Baldwin tells that at the age of 14 weeks his baby, when crying for food at night, would stop just as soon as a match was lighted. To him it was a signal that he was to be fed. He had grasped a cause-effect relation. Baldwin further reports that at four months the infant beamed delight when the feeding bottle came into view. Soon after, the child facilitated the operations involved in getting dressed by such helps as lifting his head through the opening of a garment and shoving his arms through the sleeves. These acts entail elementary perception of relations between situations. Wooley records that at four and one-half months her infant would compare sensations. She would examine a toy closely, then chew it studiously, then look at it intently again, then chew it again, and so on for a considerable period. At five months, this same child explored an open dresser drawer by rubbing her thumb and forefinger around the edges, then over the smooth outer surface, and then over the rough inner surface. Wooley timed the process and found it lasted for twenty minutes. When she was six months and one week old this same child was taught the game of rapping on the door and having it open in response. After three trials, she remembered the game one full day.⁸ For the child from nine to twelve months of age, Gesell has presented a simple test of thinking ability. The infant's attention is drawn to a little red cube on the table before him. When the infant's gaze is fixed upon the cube, it is covered with a cup, so that the handle points to the child's right hand. The average child between the ages indicated will solve the problem of regaining the cube by removing the cup.⁹

From these instances it is clear that the rudiments of thought appear early in the child's experience. The infant gives indication of his thought processes largely through his motor activity. His thinking is severely limited by the fact that he does not yet have command over the most important medium of thought,

⁸See Wooley, H. T., "Education of the Pre-School Child," *Proceedings of the First International Congress on Mental Hygiene*, The International Committee for Mental Hygiene, New York, 1932, Vol. II, pp. 706 ff.

⁹Gesell, A., *The Mental Growth of the Pre-School Child*, Macmillan, New York, 1925, p. 113.

namely, language. Although it is usual for the child between nine and twelve months of age to make meaningful response to certain words, he still has no actual word use and hence no concepts. The bulk of his thinking later will be made up of word patterns.

Intellectual processes and early childhood. From the first to the second year of the normal child's life all the thought processes are in some measure present, and they develop rapidly from the second year on.¹⁰ Wooley tells how, at fourteen months, her child clearly manifested thought. The little girl was just learning to walk. Her mother steadied her for a time by holding the collar of her coat at the back. Then the support was withdrawn. The little girl pleaded for it, but her mother thought it time for independent action. Sensing the determination of her mother, the little girl stood still for a while, as if in thought. Then her face brightened as a solution came to her. She seized the back of her collar with her own hand, and for several days walked about supporting herself in this way.

Brown many years ago collected instances of the thinking of little children, of which the following are samples:¹¹

(2 years.) *T* pulled the hairs on his father's wrist. Father: "Don't, *T*, you hurt papa!" *T*: "It didn't hurt grandpa."

(2 yrs. 9 mos.) He usually has a nap in the forenoon, but Friday he did not seem sleepy, so his mother did not put him to bed. Before long he began to say, "Bolly's sleepy; mama put in the crib!" This he said very pleasantly at first, but as she paid no attention to him, he said, "Bolly cry, then mama will." And he sat down on the floor and roared.

(3 yrs.) *G*'s aunt gave him ten cents. *G* went out, but soon came back saying, "Mama, we will soon be rich now." "Why so, *G*?" "Because I planted my ten cents, and we will have lots of ten cents growing."

The first example above shows the child's ability to generalize on the basis of his experience. The other two reveal ability to apply a general principle to a new situation.

¹⁰Thorndike, E. L., *Human Learning*, Century, New York, 1931, p. 169.

¹¹Brown, H. W., "Some Records of the Thoughts and Reasonings of Children," *Pedagogical Seminary*, II:358-396, 1892. Cited by Thorndike.

About the beginning of the second year, the child's intellectual activity takes a great spurt. He has by this time a language command of several hundred words, and they serve him as instruments of thought. The child's curiosity about the world asserts itself now. He begins to question his elders as to the nature of an almost innumerable host of things. Brandenburg¹² kept a check upon the questions put to him by his three-year-old in the course of a single day and found the total number to be 376. This is the "naming stage" of language development, during which time the child adds to the stock of his materials for thought. Somewhat later the child advances to the "why" stage of curiosity. His inquiries into the nature of things leave no doubt as to the dynamic character of his intellectual functioning. From this time forward, the child's mental development consists mainly of the continual refinement of thought processes already established. As the child enlarges his vocabulary and extends the range of his experience, his thinking matures. The faulty, naive thinking of the little child is due primarily to his lack of a sufficient fund of experience.

Development trend of the child's thought-life. In the beginning the child makes his adjustments by means of *trial and error*. When faced with a problem, he tries this, that, and the other means for solving it. When a specific act meets the needs of a definite situation, the child tends to remember it. So far the thinking of the child is little different from that of other creatures. His associations are more numerous, more quickly made, more complex than theirs, but the gross method underlying them is the same. However, by the time of the first year, ideas begin to replace trials in the child's thought process. Instead of taking in blind fashion one course and another in the effort at adjustment, the child now begins to think before he acts. He draws upon memory of past experience to help him meet the demands of present experience. He makes inferences and deductions.

In the case of Jimmie, age three, we can observe both the trial and error element and the ideational element which are present in the little child's thinking. As host for his table at

¹²Brandenburg, J. and G. C., "Language Development During the Fourth Year," *Pedagogical Seminary*, 26:27, 1919.

a nursery school breakfast, Jimmie had served all the group with tomato juice. But he did not count correctly and came to the table carrying an extra glass. He observed it was not needed and sought to return the glass to the serving tray. But the other children had meantime finished their tomato juice and set their empty glasses upon the tray, completely filling it. Jimmie paused, thinking. Then he tried to make place for the glass of tomato juice by crowding the empty glasses to one side. This attempted solution did not work. Jimmie paused again. Then he tried to balance his glass on top of the others. But it would not remain steady. After further hesitation, he triumphantly poured the juice into one of the empty glasses and laid the glass he held upon the others. He thought he had saved the juice.¹³

Bases of intellectual development. Upon what factors does the child's intellectual experience depend? It is shaped by two large matters: (1) his intelligence and (2) the social stimulation to which his intelligence is subject. Intelligence, as generally conceived at present, has its patterns established by heredity; by and large the scope of a child's intelligence is fixed by the germ plasm. It is this native intelligence which the mental tests we shall presently consider attempt to estimate. The child's intellectual activity (amount and kind of learning) is, however, affected also by the nature of his environment. Dr. Mandel Sherman found that, when children in three isolated mountain settlements were given schooling, their intelligence quotients increased by fifteen to forty points.¹⁴ This study shows how vitally the development of the child's intellectual life depends upon social stimulation. Educational encouragement counts for much in the child's mental development but it does not affect his native mental stature. The most powerfully stimulating environment will not convert an imbecile into a genius. To say this is only to make the commonplace observation that children differ widely as to their native intellectual capacities. For the precise discrimination of these differences we are now indebted to the devices known as objective *mental tests*. The wide utilization of these tests in our time calls for our close scrutiny of them.

¹³Rand, W., Sweeny, M. E., and Vincent, E. L., *Growth and Development of the Young Child*, Saunders, Philadelphia, 1930, p. 342.

¹⁴Reported in *Child Study*, 8:127, January, 1931.

V. Measurement of Intelligence

Mental tests for infants. It is a compelling fact that the great bulk of standardized mental tests do not provide for the very young child. Most of the devices do not apply to the child under three—the earliest age which the Binet schedule takes into account. Many, like the Pintner-Paterson series, begin with tasks for the five-year-old. There is the Merrill-Palmer instrument which serves to appraise the mentality of children between the ages of eighteen months and five years, but we must turn to the Gesell formulations if we would estimate the mentality of infants, that is, children under one year of age.

Arnold Gesell of the Yale University Psycho-Clinic has formulated a series of *norms of mental development* of children from birth to the sixth year. He has worked out a system of grades (A, B, and C) which may be assigned children depending upon the age at which a certain capacity is revealed. Thus the average child ("C") first walks at eighteen months, whereas the very superior child ("A") takes his first steps when he is only a year old.¹⁵

Mental tests for children. There is no want of tests which aim to judge the mentality of children, and the number of them is steadily growing. The disparity between the abundance of scales here and the paucity of them on the infant level can be accounted for in two ways: first, it is easier to work with somewhat older children and to devise tests for them; and second, the demand for tests which are applicable to the school child has been greater, because of their practical value to schoolmen. Still, all the tests are essentially alike, in the aspects of mentality which they probe. In a general way it may be said that available mental tests for children are of three kinds, the classification resting upon the kind of mental ability they seek to estimate: (1) tests of language ability; (2) tests of motor capacity; (3) tests of special aptitudes. Let us look into certain essentials of each type of test.

1. Word Tests

There are certain established devices for ascertaining the

¹⁵Gesell, A., *The Mental Growth of the Pre-School Child*, Macmillan, New York, 1925.

mentality of children which are essentially verbal in nature; that is, they call for ability in the use of words. In varying degree, they include non-language material, but the chief reliance is placed upon words. It was these tests which, at the beginning of the mental measurement movement, appropriated the coveted term "intelligence" unto themselves; and the result of this identification has been that even into the present the notion has persisted that intelligence and language facility are one. It appears to be true, indeed, that there is ordinarily a degree of correspondence between mastery over words and general mentality which is more consistent and more positive than that existing between any other single ability and the latter; but this is not at all the same thing as *identifying* intelligence with word-skill.

How heavily these tests rest upon the child's familiarity with language may be seen from a partial examination of the best known representative of this group, the so-called Stanford Revision of the Binet-Simon Scale. Observe the following tests for the three-year-old.¹⁰

1. *Pointing to parts of the body.* Points to nose, eyes, mouth, and hair. (3 out of 4 must be correct.)

2. *Naming familiar objects.* Identifies key, penny, closed knife, watch, and ordinary lead pencil. (3 out of 5 must be correct.)

3. *Enumerating objects in pictures.* (Special pictures—"Dutch Home," "River Scene," and "Post Office"—are shown the child.) (3 objects must be named spontaneously.)

4. *Giving sex.* ("Are you a boy or a girl?")

5. *Giving the family name.*

6. *Repeating 6 to 7 syllables.* ("I have a little dog." "The dog runs after the cat." "In summer the sun is hot.") (One sentence repeated without mistake after but one reading is counted as a successful performance.)

6b. (Alternate test): *Repeating 3 digits.* 6-4-1; 3-5-2; 8-3-7. (This test is passed successfully if one series is repeated correctly after a single reading.)

The concentrated stress which this test puts upon language facility is quite evident.

¹⁰Terman, L., *The Measurement of Intelligence*, Houghton Mifflin, Boston, 1916, pp. 142 ff. By permission of, and arrangement with, the publishers.

The meaning of the Stanford Revision tests. How did these tests come to be, and what is their significance? The earliest standardized test of this kind was the Binet-Simon. Binet was curious to know how children differed in their fundamental thinking. He wondered what the average child of a certain age could do, in the way of mental performance—that is, in such matters as memory, use of concepts of number and time, power of comparison, combination, and reasoning. He wished to discover inherent mental capacity, and not the mere scope of the child's information. Accordingly, he devised 54 tests of graded difficulty, for children from 3 to 12 years of age. The tests for each year established the so-called *mental age* for that year, which is the equivalent of saying that a child who passed the series of tests on the 10-year level was regarded as having a mental age of 10. The Binet tests were, of course, designed for French children, and the first distinction of the Stanford Revision consists of its adjustment of the Binet schedule to the American setting. In addition, Terman extended the upper range of the scale to the sixteenth year. Most consequential, however, was the innovation of the *intelligence quotient* (I.Q.). In the Binet scheme, it had been necessary to keep two facts in mind about a child's mentality: first, his mental level, and second, his chronological age. Terman united these two measures to give us a single index; the child's intelligence quotient is obtained by dividing his mental age by his historical age and multiplying the result by 100. Thus a child who is but eight years old and who passes the ten-year-old test rates an I.Q. of 125.

Since the tests for any given age are adjusted to the average child of that age, it naturally follows that a score of 100 is a precisely normal rating. Although slight variations are sometimes encountered, the following arrangement of scores and evaluations is standard:

140	genius
120-140	very superior
110-120	superior
90-110	average
80-90	dull
70-80	borderline
below 70	deficient

Extreme care must be exercised in the use of these indices. In estimating a child's status, it must be understood that his intelligence quotient is only one measure of intelligence, and it should not therefore be viewed as if it were the entire appraisal. Gesell cites a striking instance of the danger of misinterpreting the meaning of the intelligence score. He tells of two sisters, who, when tested, showed quotients of 70 and 69 respectively. Both needed to be put into state institutions because they could not shift for themselves. The laws of the state in which they lived ruled, however, that no child with an I.Q. of 70 or above could receive public care. The absurdity of such a distinction Gesell makes clear with the observation that the girl with the higher I.Q. was far less capable of self-care than her sister. In any case it is unscientific to regard the mental score as the whole diagnosis when in reality it provides but one indication of the whole personality and is itself in need of explanation.

The shortcomings of the Stanford-Binet tests. The advantageous use of any device presupposes a familiarity with its limitations. Certain of the weaknesses of the Terman schedule have already been indicated, such as its undue reliance upon the mastery of language as an indication of mental status, and its too precise evaluations of the child's mentality. Still another shortcoming is its disregard of the social experience of the child.

The Stanford scale aims to estimate *native* intelligence, uninfluenced by experience. The questions which make up the tests are supposedly of such a nature that all children have had an equal opportunity to make contact with them; and, consequently, the performances of children upon them must reflect basic, inherited mental differences. Such is the hypothesis underlying the tests. It is a hypothesis which goes contrary to reality, however. If we turn back to the Stanford schedule for the 3-year-old child, we can observe what Binet, and Terman after him, regard as common experiences of this period. The child is asked to name certain familiar objects which are shown to him, such as a key, a closed knife, and a penny. May not a child be alert, mentally, and never have encountered in his environment any of these objects? A student of children tells of a teacher in a remote village who once asked her to test a girl who she thought to be her brightest pupil. This "little

clipper" gave many evidences of her brightness, yet her I.Q. proved to be only 84. Why so? The phraseology of the tests was often strange to her. Her father was a farmer who exchanged his crops for goods at the village store. Naturally, she had no knowledge of money, and the Binet coin and change problems were not within her ken.¹⁷

The cultural (experiential) background of the child must always qualify his score on the Binet scale. The social settings of diverse ethnic groups (especially in the United States) are so different that it is problematic if a set of test questions can be devised which is representative of the experience of all of them. A low score on the Binet-Stanford tests may mean simply that the child in question has failed to contact the sort of experience for which the questions call. An educational deficiency is indicated oftentimes, not a mental deficiency. Indeed, the value of these tests consists largely of helping in the school placement of the child. In most cases they suggest what possibilities the child has for schooling of an academic sort, and set the probable limit of his achievement in this direction. However, where the child, because of his cultural setting, has not had a fair chance to become acquainted with the sort of experiences upon which the tests are based, another interpretation is necessary. The tests in such a case will determine the level at which the child's schooling must begin. They do not tell how far he may go, once he has, through the special stimulation of the school, made up his initial lack of knowledge.

2. Performance Tests

Because of the rather general recognition of the weaknesses of the language tests, and the fact that they serve to reveal only a single aspect of the child's mentality, increasing attention has been devoted of late to measures of motor ability. These have gone by the general name of *performance tests*, since they call for behavior of a non-verbal type. They supply us with a means for determining the mentality of children who suffer from speech irregularities, or who have not achieved a sufficient mas-

¹⁷Adapted from Gillingham, A., "Measuring Children's Capacities," *Child Study*, 9:4, September, 1931. Reprinted by permission of Child Study Association of America.

tery over words and concepts, on account of their residence in an environment which has minimized these factors. In the case of every child, these performance tests are serviceable and useful in revealing additional aspects of the general mentality, disclosing new elements of strength or weakness, thus helping to make the picture in point more complete.

The number of available performance tests makes an imposing total.¹⁸ The two general types are the *form board* and the *picture puzzle* tests, so called after the nature of the performance for which they ask. Most of the existing performance, or motor, tests fall within the one category or the other. Let us examine each of these varieties, briefly.

Form-board variety. As might be inferred from the term itself, the tests of this group have to do with the manipulation by the child of mechanical forms. These tests have as their instrument a plain wooden board which bears depressions in its surface. To fit into these recesses, blocks or other devices of corresponding shape are provided; and the usual challenge demands fitting these devices into the proper grooves.

Four arrangements of the form board test which are in common use may be instanced. In the first, the child is supplied with geometrical blocks of different shapes which are to be fitted into a board from which identical patterns have been gouged. This may be called the *geometrical block* variety. The second type is the *construction* form board. The surface of the board has been cut up into pieces, unlike in shape, the problem for the child being to assemble the units in proper relation. Third, the *cylinder* test simply replaces the blocks of the first test with cylinders of various height and diameter, which are to be deposited in appropriate depressions. Fourth, the Wallin or *peg* test consists of the following: four boards, each carrying six holes, but no two boards alike. All the holes of the first are round; all the holes of the second are square; those of the third board are evenly divided between round and square; the fourth board contains round, square, and triangular holes. The child is supplied with pegs to fit the grooves and works at one board at a time.

¹⁸See Newell, C. D., "The Uses of the Form Board in the Mental Measurement of Children," *Psychological Bulletin*, 28:309, 1931.

Picture-puzzle variety. Two kinds of picture-puzzle tests may be distinguished. The first, the *picture composition* exercise, provides the child with a picture which has been cut up into a number of irregularly shaped pieces. It is the child's problem to assemble the pieces properly. The best-known single puzzle in this class is the *Mannikin Test*, in which the pieces compose a man. Second, there is the *picture completion* variety of puzzle in which the child supplies certain missing features of the picture. In one such test, the *Healy Barnyard Scene*, ten blocks, representing portions of the picture, have been cut out. All the blocks are of the same size; and, to make the task more difficult, a number of extra pieces are mingled with the others. In order to satisfy the requirements of the test, the child must understand the meaning of the picture.

Miscellaneous performance tests. In addition to the two general types of performance tests, there are in use today a number of motor tests of individual character. The child's block-building ability forms the basis of some of these tests. In others, he is called upon to match colors, or to string beads. There is a series of *Montessori frames*, which enable the child to show how well he can manage the eye and hook, snaps, buttons, etc. The *Porteus Maze* consists of three geometric figures in double outline. The experiment requires that the child, pencil in hand, draw a continuous line between the two printed outlines.

All of these performance tests evaluate the child's skill in form perception and in motor adjustment. These skills in turn reflect fundamental processes. In the *Mannikin Test*, for example, the child who is able to unite the pieces properly must have a sense of the relationship between parts. Again, the *Porteus* test discloses such a faculty as the power of foresight; the child who "looks ahead" anticipates the corners and does not run his pencil into them. Likewise, discrimination is an aspect of general mentality, and this function is taken into account by the form board tests. The child's scores on these tests, if they do not always reveal his mentality faithfully, at least indicate how he compares with other children in his ability to perform in these ways.

3. Special Aptitude Tests

Everyday notice convinces us that certain children possess outstanding talent along definite lines.¹⁹ Mozart composed music at the age of four; Professor Sidis' son could at twelve out-calculate gray-haired mathematicians; and Samuel Rzeszewski moved his chessmen to a world championship before he was ten. Lately science has undertaken the study of these strange sources of strength. What are these special abilities? Science now regards the following as belonging to this category: (1) drawing; (2) music; (3) mechanics; (4) arithmetic; (5) reading; (6) spelling; (7) leadership. That is, excellence (or deficiency) in any one of these fields may be looked upon as a distinct aspect of the child's mentality. As a general rule, ability in certain of these respects goes hand in hand with language and motor ability; the child who shows up well as a whole is quite likely to show up well in arithmetic, spelling, and mechanical activity. But the relationship between general mentality and certain other special abilities is not a close one; thus a high score in verbal and motor tests is not at all predictive of the child's musical or drawing ability. In a word, certain of these special talents cohere more closely with ordinary intelligence than do others. Still, all of these skills are to be regarded as special, for no one of them is *necessarily* congenial with general mental ability. It is possible for a child to excel at any of the seven activities listed above and yet show up poorly in mental power as a whole. We shall see some of these things more clearly if we examine each of the seven, briefly and in turn.

(1) *Drawing*. Mention will first be made of drawing, because it is the most highly specialized of all the abilities. There is no predicting from a person's general intelligence score what his skill in drawing may be. Ayer's studies bear this point out.²⁰ He had a number of children draw a turkey feather, both representatively (artistically) and analytically (technically); and he also asked them to describe it in words. There was almost

¹⁹See Hollingworth, L. S., *Gifted Children: Their Nature and Nurture*, Macmillan, New York, 1927, Chap. 8: "Special Talents," p. 202.

²⁰Ayer, F. C., *The Psychology of Drawing*, Warwick & York, Baltimore, 1916.

no relation between ability to describe and ability to draw. A further comparison of the general school grades of these children and their drawing-skill showed that there was practically no connection between the two.

(2) *Music*. Second only to drawing as a highly specialized aptitude is music. Again it is not possible to tell from a knowledge of the general mental level of the child how well he will do in his music. Bright children often make stupid musicians; children with an eye for Shakespeare may have no ear for Schubert. For knowledge of music as a special superiority we are indebted to Professor Seashore, who has devised a series of tests for the determination of ability along this line. In the chapter on the child's relation to art, we shall make a close inquiry into these tests and their usefulness.

(3) *Mechanics*. The ability to manipulate material objects is likewise a specific mental power. It is the experience of most parents that their children are adept at taking mechanical devices apart; but it is the experience of fewer that their children are able to put the pieces together again. Stenquist has a test for the estimation of skill in this direction; various simple mechanisms, such as a door lock and an electric bell, are dismembered, and the task is to assemble the parts. The Minnesota Mechanical Aptitude Tests, which are based upon the same principle, have been widely utilized. Children who do not do well in the traditional school subjects are often found to excel in mechanical dexterity.

(4) *Arithmetic*. As concerns the ability to work with number concepts, it may be said that ordinarily, but not necessarily, this skill correlates with general intelligence in a positive and pronounced degree. That is, the child who is mentally superior in general is quite likely to be superior in arithmetic. However, this is not always the case. Every school has bright children for whom the work in arithmetic proves a stumbling block. These children are handicapped with a special deficiency in this field. On the other hand, cases are at hand of children whose school work is just average, and in some instances even quite poor, who are "lightning calculators." The latter have a mental equipment unlike that of ordinary children—an excellent short-term memory for visual details.

(5) *Reading*; (6) *Spelling*. Reading and spelling, like arithmetic, are fields in which the generally-bright child ordinarily performs to advantage. But special abilities and disabilities are common in both. Historians record evidence to show that certain of the most capable framers of the Constitution of the United States were atrocious spellers. Their general mental strength can hardly be questioned, but they lacked skill in spelling. Every teacher has pupils who fit into this sort of description. Conversely, there are children whose superiority in spelling or reading ability belies their general intelligence. Terman tells of his experience with Martha, who read fluently at a tender age. Although but little more than two years old, she read from a primer like a school child. It seemed she must have an intelligence quotient as high as 300. But testing her later, Terman found her I.Q. to be only 150.²¹

(7) *Leadership*. It is a common comment that the leaders of men are not those who are intellectually-eleet. It may be that leadership calls for a different set of mental powers from those which distinguish the scholar or the inventor. The problem here is complicated by the fact that leadership involves more than the mind of the leader; it includes his whole personality. Physique and temperament may be equally as effectual as mind in the making of a leader. For all this, mental factors remain important; and the child who leads his fellows and has command over them enjoys certain mental abilities which are denied to the others.

The value of mental tests. The several mental tests have rare value when they are rightfully understood. No one test by itself pictures the whole mental life of the child. Each test has particular value for revealing the child's special strength or weakness in respect to the functions tested. Thus the Binet schedule is an excellent device for determining the child's skill in the use of words, his ability to deal with concepts—word, number, and time. Since school work is traditionally composed of subjects which require word mastery, the Binet tests are reliable indicators of the probable school success of children. When the motor tests supplement the verbal tests, a more re-

²¹Terman, L. M., "An Experiment in Infant Education," *Journal of Applied Psychology*, 2:219, 1918; also *Handbook of Child Psychology*, Edited by Carl Murchison, Clark Univ. Press, 1931, p. 633.

liable impression of the child's mentality is possible. In the same way, the Seashore Musical Aptitude Test is serviceable in showing musical strength or weakness; and the Allport Ascendency-Submission Test helps to show whether or not the individual has leadership possibilities. Each test must be interpreted separately, as furnishing a particular insight into the mind of the child. It accordingly follows that the most inclusive view of the child's mentality will be secured if he is subjected not to one test, or a few tests, but to a battery of them.

When they are substantial, these mental tests serve two essential purposes: first, they provide us with an understanding of the mind of the child which is more precise and more accurate than can be had by means of ordinary observation; second, they make it possible for us to adjust the child's ambitions to his capacities. It is difficult to conceive of a service being rendered by science more consequential than this. Few things are more pathetic than the attempt of a child to prepare himself for activity for which he is not capable. Parents who are unmindful of the academic limitations of the minds of their children are futilely endeavoring to prod them through a college course; children who have not the least ability for work in mathematics are often urged to continue their residence at an engineering school; children without the least flicker of musical fire are cajoled and coerced into practicing a weary hour a day. There are all sorts of life tragedies here, which result from the child's attempt to engage in activities for which he is not suited.

Fortunately the field of mentality is far-flung. There are many talents the mind can display. In the wide range of abilities, the child should readily find himself. With the help of a battery of mental tests, he can become apprised as to his points of strength and his points of weakness. The value of adequate mental tests is here, that they make possible the scientific adjustment of the child's pretensions to his capacities.

VI. Subsequent Discussion

Undoubtedly, the child's success in his undertakings will depend in considerable measure upon the extent of his capacity for these undertakings. But success also rests upon factors

other than ability. Every teacher knows it is not necessarily the brightest pupil who wins the highest prizes and the best positions. Ability alone will not assure achievement. There must be present compelling interest (motivation) which cultivates skill, instead of permitting it to lie fallow; there must be present, also, habits of application, which keep the mind at work. In fine, the use to which a child will put his mental powers depends upon the nature of his emotional attitudes and his social habits. To a consideration of the first of these matters, the child's emotions, we shall now turn.

READINGS

1. Baker, H. J., *Characteristic Differences in Bright and Dull Pupils*, Public School Publishing Company, Bloomington, 1927.
(Make a list of the significant differences mentioned. How early in the life of the child are these differences detectable?)
2. Baldwin, J. M., *Mental Development in the Child and the Race* (3rd ed. rev.), Macmillan, New York, 1920.
(What main steps or periods does the writer recognize in the mental development of the child? Illustrate each phase of growth.)
3. Baldwin, B. T., and Stecher, L. I., *The Psychology of the Pre-School Child*, Appleton, New York, 1924.
(Chaps. III-VIII. What different aspects of child life does this book consider under the general heading of mental development? Describe in detail one experiment relating to each of these aspects.)
4. Ballard, P. B., "Physical and Mental Development of Children," *Nature*, 127:561, April 11, 1931.
(What relationship between these two aspects of growth is indicated by the writer? What differences between the two are noted?)
5. Fisher, D. W., "Teaching the Young to Think," *Mercury*, 3:335, November, 1924.
(Does the writer believe children should be taught *what* to think as well as *how* to think? Do you agree? Why?)

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6. Fulton, S. E., "Teach Your Child to Think," *Parents' Magazine*, 5:15, August, 1930.
(How does "family discussion" stimulate the child's thinking?)
7. Gesell, A., *The Mental Growth of the Pre-School Child* (A psychological outline of normal development from birth to the sixth year, including a system of development diagnosis), Macmillan, New York, 1925.
(Describe the method by which the several series of "norms of intellectual development" were obtained. What value can you see in such a scientific contribution as this writer makes?)
8. Hall, G. S., *Aspects of Child Life and Education*, Ginn, Boston, 1907.
(Chap. I: "The Contents of Children's Minds"—What is the method here employed to gain insight into children's minds? Of what does the content of their thinking consist? Are there any fallacies in the writer's conclusions?)
9. Hollingworth, H., *Mental Growth and Decline*, Appleton, New York, 1927.
(Examine the Table of Contents of this book. Upon what basis is the material organized? Read any chapter that appeals to you and indicate the nature of your reaction to it.)
10. Jordan, A. M., "Mental Growth," *Journal of Applied Psychology*, 14:517, December, 1930.
(State the problem which the author sets for himself in this article. How does he limit or "define" his problem? What new knowledge did you derive from this account?)
11. Koffka, K., *The Growth of the Mind*, Harcourt, Brace, New York, 1924.
(This book is an exposition of the "Gestalt" standpoint in psychology. Explain this position, and illustrate with examples taken from the book.)
12. Major, D. R., *First Steps in Mental Growth*, Macmillan, New York, 1906.
(What age period of childhood does this writer treat? List the differences between any two mental levels.)
13. Murchison, C., and Langer, S., "Observations of the Developments of the Mental Faculties of Children," *Pedagogical Seminary*, 34:205, June, 1927.
(What methods were employed in this study? What new understanding of the mental life of children does this study give you?)

14. "Nature and Nurture; their influence upon intelligence and upon achievement," *Journal of Educational Psychology*, 19:361, September, 1928.
(Read any two papers carefully. What are the points of agreement? Points of disagreement? Which of the two is more factual?)
15. Piaget, J., *Language and Thought of the Child*, Harcourt, Brace, New York, 1932.
(Chap. V: "The Questions of a Child of Six"—What are the three big groups of children's "whys"? Give illustrations of each.)
16. Statsman, R., *Mental Measurement of Pre-School Children*, World Book Company, Yonkers-on-Hudson, 1931.
(Read any two connected chapters. Describe, in your own words, any one of the methods used to determine intelligence.)
17. Watson, J. B., "How We Think," *Harper's*, 153:40, June, 1926.
(Explain fully: "We learn to think by learning to do." In what respects do you dissent from the views of the writer? Why?)
18. Wheeler, R. H., and Perkins, F. T., *Principles of Mental Development*, Crowell, New York, 1932.
(Chap. VIII: "Perception and Thinking in the Child," p. 138—Which of the experiments presented impress you most? Why?)
19. Wile, I. S., *The Challenge of Childhood*, Seltzer, New York, 1925.
(Div. II: "Intellectual Problems"—Make a list of the various problems of childhood which are here considered. Describe each in a brief sentence or two.)
20. Woodrow, H. H., *Brightness and Dullness in Children*, Lippincott, Philadelphia, 1919.
(Select one specific case of defective mentality which is presented by the writer. Briefly, characterize the deficiency; indicate also the relative influence of heredity and environment.)

CHAPTER VI

THE EMOTIONAL DEVELOPMENT OF THE CHILD

"Being a child should not hinder becoming a man; becoming a man should not prevent being a child."

—SCHLEIERMACHER

I. Introduction

Three fundamental matters will occupy our thought in this chapter. First, we shall briefly estimate the *significance* of the child's emotional life. What is its relation to his conduct? Second, we shall trace the *development* of the child's emotions. What are his first affective states and how do these become modified as the child matures? With development there goes the possibility of emotional imbalance. Therefore we shall consider, third, the nature of emotional *control* and the achievement of emotional *health*.

II. Significance of the Emotional Life

It is noteworthy that Scripture declares: "As a man thinketh in his heart, so is he." Not simply "as a man thinketh," but "as a man thinketh *in his heart*." In the world of living things, feeling is more fundamental than thought. Who knows when children first begin to speculate? But who wonders when children first begin to feel? Feeling starts with life and continues throughout its course. For the most part the child "feels" his way along the path of life.

What is so deeply rooted in the nature of the child will of necessity play the primary rôle in determining his conduct. The child as a general rule does those things which give him

the greatest satisfaction. He does the things that please him most, even when he does not do as he pleases. The underlying behavior urge is feeling or desire. After he has behaved in a certain fashion the child may rationalize his actions and ascribe good reasons for his having done thus and so. These reasons, however, are merely after-thoughts, not thoughts which actually preceded his actions and which actually helped to bring them to pass. The real reasons for his acts are ordinarily not reasonings at all, but feelings and desires.

It is clear that we cannot afford to slight the affective factors in the child's experience, for what so basically governs the child's conduct must chiefly determine his achievement and his happiness. It is a good thing for the child to have a sound body, but that will not by itself assure him of satisfaction. Likewise, a superior mind is a gift to be coveted by him, but neither will this advantage vouchsafe happiness. The course of every child's life is primarily shaped by the currents of his feelings. Therefore, it is a matter of the first importance for us to have knowledge of the way the child develops emotionally.

Nature of the emotional life. It is customary to distinguish two fundamental feeling tones in all sentient creatures, the pleasant and the unpleasant. We know from introspection that these two types of feeling exist, and we know from observation that certain kinds of response are ordinarily attached to each. It goes almost without saying that the child prefers to experience agreeable feeling sensations; and from this point of view it may be said that much of the child's behavior is simply effort on his part to eliminate unpleasant sensations from his consciousness, or if satisfying sensations prevail, to sustain them. From time to time the even tenor of the ebb and flow of feeling is interrupted and an up-welling of emotion occurs. Emotion bears the same relation to ordinary feeling that the swell bears to the ordinary ripple of the sea. It is composed of feeling, but of an accumulation of feeling. Like mere feelings, emotions are also pleasant or unpleasant; but since they represent strong surgings, the feeling tone is accentuated in degree.¹

¹For diverse conceptions of the nature of emotions, see *Feelings and Emotions: The Wittenburg Symposium*, Clark Univ. Press, Worcester, 1928.

III. The Development of the Emotions

Emotions of the infant. There is not complete agreement among qualified students of infancy as to the identity of the child's first feeling reactions. A main division of opinion exists between the representatives of the experimental and the non-experimental schools of child study. The non-experimental group, which bases its verdicts upon ordinary observation and inference, is represented ably by William James and William McDougall. Both of these men supply a rather long list purporting to name the original emotional states. McDougall attributes a separate emotion to each instinct; thus, for example, the emotion of wonder as the accompaniment of the instinct of curiosity, the emotion of disgust in attendance upon the instinct of repulsion.² This method of inferring the emotional equipment of the child from the observed feeling states of the adult is not countenanced by the experimentalists in child study. The latter are committed to laboratory technique. That is, in a carefully controlled setting they subject the child to a variety of stimulations and note carefully the emotions that appear, also the precise stimulations which are capable of arousing them. John Watson is the best known proponent of this method, and his designation of *fear*, *rage*, and *love* as the three primary emotions of childhood has received wide recognition.³

Watson found that fear may be induced in two essential ways. First, a sudden, intense sound will cause the infant to start; second, the sudden withdrawal of body support will conduce to the same reaction. The abruptness of the experience appears to be a significant factor in the causation of fright. Watson sought to stimulate the young child to a fear response in many other ways. There are a number of things of which little children are traditionally supposed to be afraid, and with these things Watson confronted his children in the laboratory. The following were, one by one, ushered into the presence of

²McDougall, W., *An Introduction to Social Psychology* (16th ed.), Luce, Boston, 1923, pp. 47-119.

³Watson, J. B., *Psychological Care of Infant and Child*, Norton, New York, 1928, Chap. I: "How the Behaviorist Studies Infants and Children."

the children: a white mouse, a rabbit, a snake, a fur coat, et cetera. Toward none of these things did the children (all too young to walk) show any reactions of fear. Instead of shrinking from the white mouse, the children would ordinarily reach out to catch him. It is clear that the fear of animals as such is not a fear which is native to the child, but one that needs to be learned through experience. Likewise, fear of the dark did not exist in the children tested by the experimenters. Two promoters of fear, and two only, was Watson able to discover. This does not mean that there may not be other things (which fell outside Watson's ken) capable of inspiring fear in the new-born babe; but it does suggest quite strongly that most of the fears which we later encounter in children are not native or natural, and therefore not necessary or inevitable.

The emotion of anger is called out in infants when, through restraint, they are denied the free movement of their limbs. Holding a child's head rigidly in place will cause his face to flush. Pinning his arms to his sides, or pressing his legs together, so that he cannot move them, will stimulate the child to anger. Affectionate response, on the other hand, results from the stimulation of the so-called erogenous zones, or skin areas of special sensitivity. Appropriate petting, stroking, caressing of the child will evoke the emotion of love, according to the Watsonians.

However, not even within the camp of the experimentalists is there agreement as to the emotional nature of the infant.⁴ One group of scientists, for whom Mandel Sherman is spokesman, challenges the idea that children possess at the outset of life such precise, well-defined emotions as fear, rage, and affection. Sherman had motion pictures taken of children, showing their emotional reaction against certain standard "interferences," such as loss of support, loud sudden sound, denial of free body movement. He had the film cut up, so that the responses were divorced from the experiences that produced them. He then asked a group of eminent students of childhood to identify the emotional expressions registered upon the film. It is significant that these experts were unable to differentiate specific

⁴See Jones, M. C., "The Conditioning of Children's Emotions," in *Handbook of Child Psychology*, Edited by Carl Murchison, Clark Univ. Press, Worcester, 1931, p. 71.

emotional reactions with any degree of accuracy. Sherman concludes from this evidence that the infant does not give clear-cut emotional responses, such as fear and anger and love. It is his conviction that the young child makes only an undifferentiated emotional defense against interference with his state of equilibrium. His emotions are not "specifics," but represent a general feeling-effort on his part to adjust to disturbance.⁵

Developmental trends. How do the child's feelings change as he matures in body and in mind? In the complex process of the child's emotional development we may recognize three fundamental trends: (1) differentiation; (2) interrelation; and (3) extension. We shall consider the first two briefly and the third at greater length.

Differentiation. If there be doubt as to whether or not the infant shows clearly distinguishable emotional reactions, such as fear and rage, there can certainly be no question about the manifestation of such distinct and specific responses in the child who is older. With the passage of time the child develops an exceedingly varied repertoire of acute feeling reactions. For instance, the generalized response to disturbance is replaced by three specific reaction patterns: fear, disgust, and anger. The impulse to flee that which is feared is common to the growing child. If the source of disturbance arouses not fear but disgust, the child simply turns or moves away from the object of his distaste. But if the annoying object provokes anger, the child is inclined to attack the nuisance. With increasing age and social experience, still other emotions take shape. Among the unpleasant states, *shame* soon appears. Later the child becomes capable of *grief* and still later of *despair*.

Interrelation. As the child grows in experience, he not only adds to his stock of fundamental feeling tones, but he learns to blend fundamental feeling tones into a considerable variety of combinations. This is what is meant by the interrelation process, as the result of which the child's feeling life becomes infinitely enriched. Thus Romeo experiences the satisfactions of "sweet sorrow" on bidding Juliet good-night;

⁵Sherman, M. and I. C., "Sensori-Motor Responses in Infants," *Journal of Comparative Psychology*, 5:53, 1925; also a series of three articles on "The Differentiation of Emotional Responses in Infants," *Journal of Comparative Psychology*, 7:265, 1927; 7:335, 1927; 8:385, 1928.

Lot's wife feels "the fear that fascinates"; and Shelley knows of "laughter fraught with tears." In childhood, jealousy is a representative emotional compound. It is a derivative of all three fundamental emotions: affection, fear, and anger. When jealous, the child fears the loss of something he covets and he hates the object responsible for his fear.

Extension. It has so far been observed that the maturing child develops specific emotional responses, and further that these affective patterns are capable of such blends as to yield new feeling states. With increasing experience the child also sees an extension of the number of kinds of situations which are capable of exciting his fundamental emotions. As we have seen, during the early days of an infant's life such situations are few in number. It is our plan to consider now the ways in which emotions "grow" through their extension to an increasing number of situations.

The extension of fear. When fear as a distinct, differentiated response first appears, it has one of two bases: a loud, sudden sound or loss of body support. These are the "original" sources of fear. But the child takes on new fears as he matures. He comes to be startled by a variety of things which once did not upset him. How does this come to pass? Four principal means may be instanced by which fear gains added dominion in the life of the child: (1) conditioning; (2) increased perception; (3) negative suggestion; and (4) harsh reality.

1. *Conditioning.* The word "conditioning" describes the process whereby the child learns to react to a new situation as he already does to one that is familiar to him, because the new situation and the old one become linked in his consciousness. Thus the child is not at the outset afraid of the dark. How may he acquire this fear? Here is one setting. The child has been put to bed in a dark room. The night is blustery. A strong gust of wind catches the open nursery door and swings it shut, with a resounding slam. The child is startled. Then the window-blind rolls up with a bang as it hits the top. The child begins to cry. The setting is ideal for the upbuilding within him of a fear of the dark. The original dread of loud, sudden sounds is coupled with the darkness in which they occur.

2. *Increased perception.* As the child grows up and gains in knowledge of the world about him, he becomes afraid of an increasing number of things which formerly held no terror for him.⁶ Oftentimes what passes for courage is simply a person's inability to foresee the consequences of his actions. This is certainly true of the infant. He is not conscious of any danger to himself as he reaches out for the snake that has been ushered into his presence. He does not know the menace that lurks in fire. But with increasing age, there comes increasing perception of the nature of the real world; and with this truer conception of life comes that lessened trust for certain aspects of his experience which we call fear. Thus we find the presence of fear-response in older children toward precisely those things which infants accept with emotional equanimity, as for example, insects, snakes, and mice. Again, the tot in his crib accepts familiar associates and strangers alike; he does not discriminate against the latter because he does not perceive that they are different. At about nine months of age, however, the fear of strangers shows itself. The child has come to recognize those who are in regular attendance upon him and to identify them with feelings of safety, whereas the stranger by his newness is contrariwise a portent of danger.

It is in relation to the so-called *social fears* that increased perception of reality is especially significant. By social fears we mean those which have to do with the child's social position and his relation to his fellow men. Certainly the new-born babe has no regard for the opinions about him which his elders entertain. He does not fear the possible loss of their esteem and govern his conduct accordingly. Compare his indifference here with the intense concern of the older child. The latter modifies his natural impulses at many points because he fears the consequences of an adverse public opinion. When he commits a mis-deed, he suffers from the dread of being found out. The child's conduct comes to be regulated at many points by social fears, which emerge with the growing perception by the child that his happiness largely depends upon the estimates of him that his fellows acquire.

⁶For further discussion of fear in relation to maturation, see Jones, H. E. and M. C., "A Study of Fear," *Childhood Education*, 5:136, 1928.

3. *Negative suggestion.* Positive fear suggestions are constantly being fostered by those persons who utilize the "scare technique" in the discipline of children. Mention may be made of the common resort to telling the child that disobedience on his part will lead to his being abducted by some creature horrible to his imagination, like the bogie-man. Fear of the dark is frequently inculcated by repeated suggestions as to the perils connected with it. "Be careful when you go out at night" warns an adult, and the child who hears this admonition lets his imagination run riot upon the dire possibilities of darkness. One young girl, whose chore it had been for some time to take the day's trash down to the barrel at the rear of the house, in the evening after the supper dishes were done, performed this task without qualms, until one evening the neighbor woman next door spied her returning alone in the night and said, "My but you're a brave girl to go back of the house by yourself." Until that time, the girl had been unafraid of the night. A new note was now introduced into her thinking. Why should she be thought brave, unless there were hazards involved in the experience of which she had not been aware? Of a sudden she became afraid of the dark.

Not the words alone, but even more the manner of a child's guardian may arouse the excitement of fear in the child. In illustration of this point, we may take stock of the anxiety about health which is characteristic of children whose mothers show undue solicitude concerning their welfare. The case of *A* shows well the beginnings of such morbidity in the young child. In the course of play, *A* accidentally slashed the palm of one hand with the sharp edge of a piece of paper. This was his introduction to the cutting power of paper. This discovery, together with the suddenness with which the accident occurred and the excitement attendant upon his first glimpse of fresh red blood, so captured the child's attention that he simply stood still with his gaze fixed intently upon his open palm. While he was thus absorbed in observation, his mother entered the room, saw the cut, and screamed. Quickly she ran to his side, with much emotion she examined his hand, then was off as quickly again for the iodine. The cut was long, but not deep. When the accident had first occurred the child had shown only in-

terest in his experience. When the mother returned with the iodine, however, she found her son in tears, very much beside himself with fear. She had conveyed her own apprehension to her child. Enlarge this reaction and you have a picture of the hypochondriac, that pitiable creature who lives in continual fearfulness of the state of his health.

4. *Harsh reality.* The child is born into this world an abject creature of helplessness, entirely dependent upon the ministrations of others for the bare preservation of his life. It is clear that he is in no position to encounter anything but a friendly world. His urgent needs are for kindness and care. Hence, if the circumstances surrounding him are forbidding, he will shrink from them with fear.

Poverty, physical deficiency, family discord, relentless discipline, undue social discrimination—these are kinds of harsh reality with which a child may be confronted, and from which he often recoils with a feeling of dread. The very poor child, for example, suffers from the fear of chronic insecurity. Besides, he is harassed by a sense of shame. He fears the scrutiny, the pity, and the ridicule of children who are better off than he. If, as compared with other children in his circle, a child is put to a marked disadvantage by the conditions of his life, he will tend to look out upon the world with a fearful mind.

The extension of anger. It is interesting to observe three stages in the anger-development of the child. These may be identified as (1) the ego level; (2) the ego-identification level; and (3) the ethical level.⁷ Each of these categories warrants brief description.

1. *Ego-anger.* The very young child is irritated only on account of interference with self. His resentment is entirely ego-resentment. At first he shows rage when the movements of his body are hampered; his anger is of physiological origin. However, as he grows older, he extends his wrath against psychological limitations as well. He wishes not only the freedom to move his limbs, but the right to do as he pleases. He responds with temper when his self-assertive strivings are balked. Goodenough's study shows the ego-rebellions of children against

⁷Cf. Cooley, C. H., *Human Nature and the Social Order*, Scribner, New York, 1922, Chap. 7: "Hostility," pp. 264 ff.

established control as most common at about the age of three.⁸ From this time on children become better accommodated to the idea of social regulation. But throughout life they continue to show resentment against limitations upon the full expansion of their egos. They are vexed by criticisms, ridicule, and regulation of their behavior.

2. *Ego-identification anger.* However, as the child grows older, he makes contacts with things outside himself, such as persons and material objects; and, as the result of repeated association with these persons and things, he becomes emotionally identified with them. Thus the child identifies himself with the members of his family, his pets, his playthings, and even with his clothes. These things with which he enjoys constant and intimate association grow to be sorts of ego-extensions. Now he may become exasperated not as the consequence of some attack upon his ego proper, but as the result of some affront to these things with which he has interwoven his life.

3. *Ethical anger.* In the case of ethical anger, the emotion is not induced by personal matters. The concern is for some thing or condition which has no effect upon the status of the one concerned. Thus children may be taught to turn their ire toward those who treat animals cruelly. They may be moved to "righteous indignation" against those who exploit the labor of little children in the beet and tobacco fields, in the mines, and in the factories. We call anger on this level "ethical" because it is grounded upon moral principles, such as justice and kindness. This level is achieved last, because it presupposes a degree of mental and social development which permits the child to adopt abstract principles of conduct.

The extension of affection. What is the history of the affection-life of the average child? In what directions does it go? To whom is it affixed? The normal boy and the normal girl, in the course of their maturation, shift their affectionate interest from one source to another, until it finally comes to be lodged in a life-mate. Love for, and marriage with, a mature member of the opposite sex is the desirable goal of emotional

⁸Goodenough, F., *Anger in Young Children*, Univ. of Minnesota Inst. of Child Welfare Monograph, Series No. 9, Univ. of Minnesota Press, Minneapolis, 1931.

development. We shall trace the steps by which the average child achieves this objective.⁹

1. *The affectional development of the boy.* It is quite clear that the child is born with no natural affection for his mother.¹⁰ At birth he does not even know she is his mother. If, when he is not yet a year old, she absents herself from him for a period of a month or so, he may not recognize her upon her return. If a nurse substitutes for her, the nurse may completely displace the mother in the child's affections, for the child naturally leans toward the person who ministers to his needs. But ordinarily it is upon his mother that the babe is chiefly, if not entirely, reliant for early care and affection. As a result the child attaches himself to his mother. She becomes his "first love." On this account the first stage in the development of the boy's affection has been called *the mother phase*. This period continues, on the average, until the boy is seven or eight years old, but naturally there is considerable individual variation in this regard.

The second stage in the affectional development of the boy is the *father-phase*. The boy clings to his mother until such time as there comes into his consciousness the idea that he would like to be "grown-up." He has outgrown the period of utter dependence and he has as a consequence in large measure lost the privileges and the protection that go with utter helplessness. Being a baby no longer appeals to him; and yet he is not an adult. So he builds up fantasies of power, and identifies himself with his father, who symbolizes for him what he would like to be. "When I am a big man like daddy," it is common to hear a child at this time say, "I shall do so and so." Also, about this time, the child enjoys his first school experience and his first protracted stays away from home. These factors and others help to wean the boy away from the close relation which he has up to this time had with his mother. Until he is about twelve years old, the boy's chief interest and affection are centered in his father.

⁹Cf. Miller, H. C., *The New Psychology and the Parent*, Boni, New York, 1928, Chaps. IV, V; also Flugel, J. C., *The Psychoanalytic Study of the Family*, International Psychoanalytic Press, London, 1929.

¹⁰Cf. Briffault, R., *The Mothers*, Macmillan, New York, 1931, p. 52.

The third phase in the process of emotional development is not difficult to recognize; it is the *play-mate phase* (by Miller called the "school phase"). As the child's initial self-assertion causes him to identify himself with his father, so the child's continued desire for power and independence leads him to cast his lot with his play-group. The allegiance of the child to his gang during this period is striking. His primary interest and devotion are no longer centered in his home. His spirit of independence is in the making, and it will later assert itself in his desire to set up a home of his own. In one respect this period in the boy's life is like the one that preceded it: his interests are essentially masculine. Before, he was devoted to his father; now he is loyal to friends of his own sex. The repugnance and disdain of the pre-adolescent boy for association with girls is proverbial. But this stage, which carries through on the average from twelve to eighteen, marks an advance over the previous one, in that the boy is now primarily concerned with his peers.

The process of normal maturation eventuates in marriage and for this reason the period that enters with the eighteenth year may be called the *mating phase*. The boy's attitude towards the opposite sex undergoes revolutionary change, from indifference, and even contempt, to ebullient interest. His fundamental concern now is to make himself attractive to girls. His interest in them is dynamic, aggressive; and the ultimate consequence of this emotional drive is that he selects out one girl for special concentration of effort, woos and wins her in marriage. In hetero-sexual marriage the boy achieves emotional maturity.

2. *The affectional development of the girl.* Like the boy, the girl also begins her affectional life with an emotional leaning towards her mother, and for the same reasons. After the preliminary period of self-love,¹¹ during which time the infant shows complete absorption in her own condition, she discovers her mother and turns her stream of affection in this new direction. From this point on, however, the girl's emotional progress assumes a course different from that of the boy's.

There is not entire agreement among students of this subject as to the nature of the next phase in the girl's normal

¹¹Cf. Rand, W., Sweeney, M. E., and Vincent, E. L., *Growth and Development of the Young Child*, Saunders, Philadelphia, 1930, p. 259.

maturing process. Certain writers, for example Flugel, and Groves after him, describe a brief father-phase following the initial mother attachment. These authorities would have the transition from mother-love occur, roughly, about the sixth year, and have the father-devotion extend through the tenth year. Certain other specialists in this field, such as H. Crichton Miller, and George K. Pratt after him, assign no place to such a father stage, but rather regard the girl's association with her playmates as the second level. The first school of specialists claims to find in the little girl of six certain fundamental expressions of the maternal impulse, which impel her toward her father. The latter encourages the attentions which his young daughter offers him, in a way in which he does not respond to the overtures of his son. In addition there often develops in the little girl some feeling of rebellion against the fact that she is a girl and must endure limitations upon her freedom such as are not suffered by her brother. Unconsciously she seeks to become identified with her father, who represents the power she desires for herself.

The writer's own investigations of this stage of development reveal that its presence and absence are about equally common. About half the girls questioned could not recall having had special interest for their father at this time in their lives. On the other hand, a number of the group remembered the experiences of this period with exceeding clearness and pleasure, indicating thereby the strong hold which the relationship had taken upon their feelings.

The next stage in the girl's development is the *play-mate phase*, which begins ordinarily about the age of ten and continues to the fifteenth year. The so-called "girl crushes" of this period are well known. The girl's affections are transferred to her peers. Her intimate associations are now with members of her own sex.

Meantime the girl is maturing physically. Her maternal impulses come to occupy the central position in her consciousness. As she becomes increasingly aware of sex, and attentive to its claims, she naturally turns toward her father. So the girl advances to the *father-phase*, ordinarily a brief period lasting from about the fifteenth to the eighteenth year. The girl is mov-

ing toward the time when she will choose a life-mate. Now she devotes her affection to her father, the man she knows best, the man who is available, the man after whom (if he is at all decent and dutiful) she models the image of the husband she would like to have. During the last period, the *mating phase* of development, her interest in boys is uppermost. She centers her interest upon first one and then another, until finally she determines upon one. She achieves emotional maturity in normal, adult marriage.

IV. The Regulation of the Emotions: Emotional Health

From the very beginning of his life, the child finds that the expression of his feelings is subject to social control. As a natural creature, his emotional behavior does not differ from that of little animals, but organized society insists he shall not long continue to be simply a little natural creature. When he is frightened, he may wish to cry, but society frowns upon his crying. He is taught that he must not show fear, that it is unmanly to do so. When the little child is angered by some provocation, his fighting spirit is aroused, and it is natural for him to want to do damage to the provoking object. But society tells the human child from the outset that, if he feels anger, he must restrain it. In civilized society, the extreme expression of anger, namely murder, is the capital offense. Similarly, society regulates in very specific ways the manner in which the child may express his feelings of affection.

In a civilized society the emotions of the child must be controlled. The question is: how may we regulate them wisely? How can we adjust the child's emotional life so as to have it conform to his own needs, and, at the same time, to the needs of society? This problem calls for the education of the child's emotions. To be effective this education must make a dual approach to the problem. On the one hand, it must aim to control the child's sensitivity to stimulation, so that he will not be subject to constant emotional turmoil.¹² On the other hand, it must secure the proper social disposition of his emotional states

¹²Cf. Cameron, H. C., *The Nervous Child*, Oxford Univ. Press, New York, 1929, pp. 49 ff.

when once they have become aroused, through teaching the child the need for, and the nature of, legitimate self-expression. An education which successfully realizes both these objectives provides the child with emotional health. It will be helpful for us to consider how such adjustments may be effected in respect to the three basic emotions of fear, anger, and love.¹³

Eradication of fear. What shall we say about the propriety of inculcating fear in the child in order to obtain educational and disciplinary ends? Granted that fear may work for good as well as for ill, still we can never tell in advance of our arousal of the fear emotion, which direction it will take in a given child and in a given circumstance. Therefore resort to fear is a treacherous technique. The possibility of harm which attaches to it is too great to warrant its use. It is hard to conceive of any result, obtainable by means of the threat of fear, which cannot with much less hazard to the emotional health of the child be secured through other and positive means. Thus, for example, it is not necessary that a child be taught to fear matches, if he is to use them safely. He may instead be taught *caution* in their use. Caution suggests the possibility of harm. Caution differs from fear, however, in that it does not rest so heavily upon emotion. Its appeal is partly to the mind, so that it frees the child for activity instead of fettering him, as does fear.¹⁴

Leaders of children need not only to safeguard their charges from fear-inspiring situations; they should also know how to deal with fear when it arises so as to prevent its becoming established in the consciousness of the child. Since the opposite of fear is self-confidence, fright in a child can often be allayed through acts which are re-assuring of his safety. A two-year-old child who was sleeping out-of-doors awoke in the early evening at the crack of thunder overhead. He was frightened by the terrific clap and started to cry. This little child reacted instinctively against a loud, sudden sound. In an adjoining room his father chanced to be reading a book. Quietly he went to his

¹³Preliminary scales for estimating the emotional development of young children are supplied by Bridges, K. M. B., *The Social and Emotional Development of the Pre-School Child*, Kegan Paul, London, 1931, Part III.

¹⁴Cf. Blatz, W. E., and Bott, H., *Parents and the Pre-School Child*, Morrow, New York, 1929, Chap. 9: "The Fears of Children."

son, as quietly he assured the child that everything was all right, then put the lad upon a couch in his own room, and returned to his reading. By his unemotional manner, also by his comforting words, and his provision of a place of refuge, this father snuffed out the spark of fear which had barely begun to glow.¹⁵

In the course of her experiments on fear in very young children, Mary Cover Jones devised a method for its elimination. Using laboratory procedure, she inculcated a fear of rabbits in an infant, by striking a gong when the rabbit was being introduced to the child. Ordinarily (that is, naturally), a child does not fear rabbits, but in this case Mrs. Jones had "conditioned" him against them. The question arose, how "un-condition" this fear reaction? How make the child unafraid again? Various popular methods were used to no avail. Discussion, reasoning, ridicule, and example failed to induce self-confidence in the child. Then this method was tried: at noon one day, when the child was about to partake of his luncheon, the dreaded rabbit was caged and placed in the same room with the child, but at a considerable distance from him. Once a day, at the same hour, the rabbit was introduced, each time being brought closer to the child. If the child showed fear, the advance of the rabbit was halted. Soon the child tolerated the rabbit on his table, then on his lap. His fear of the rabbit had been vanquished through gradual re-association of the object feared with a pleasurable activity.¹⁶

Treatment of anger. How may the child's anger emotion be educated properly? Two suggestions are in order. In the first place, the emotional outbursts of the very young child need to be dealt with intelligently when they occur. Occur they will, for it is natural for the child to give vent to anger when he is challenged. But he must be taught by his guardians the necessity for emotional control. How may this be achieved? By ignoring his temper tantrums when they occur. The child displays his fury for a purpose (he wants something and has been denied it; he craves attention and fails to secure it, etc.); if

¹⁵Groves, E. R., *Personality and Social Adjustment*, Longmans, Green, New York, 1931, p. 92.

¹⁶In a symposium: "Children's Fears," *Child Study*, 8:226, April, 1931. Reprinted by permission of Child Study Association of America.

his anger-spells fail to secure for him either the coveted attention or the satisfaction of his desires, he will in time abandon this technique, which he has discovered is ineffective. If, on the contrary, the child's desires are gratified whenever he accompanies them with a "demonstration," the tendency for him to react negatively against disturbance or displeasure becomes fixed.

In the second place, the successful regulation of anger calls for the attainment by the child of a proper sense of values. He needs to be taught early the distinction between the important and the unimportant, so that he is not moved to react against little things. He needs to have a sense of humor, so that he does not take himself and his own affairs too seriously. Cowper had a proper sense of values, which made it impossible for him to take offense at the insults directed against him; he said, "No gentleman will insult me, nobody else can." A proper sense of the nature of things requires, also, that the child have the ability to appreciate the true source of responsibility for behavior. Most people are guilty of what the psychiatrist calls *projection*. They are forever blaming someone else or something else for their own difficulties; they project the blame outside themselves. "I am mad because he teased me," says the child. He needs to be taught to say, instead, "I am mad because I am susceptible to teasing." So often, if we are honest with ourselves, we shall have to agree that "the fault is not with our stars, but with ourselves," that we are irritated. A proper sense of values, and an understanding of the nature of reality, will go far toward providing the child with adequate control over the emotion of anger.

Dangers of the affectional life. We have seen how the normal boy and girl advance in affectional development by stages until they become psychologically qualified for marriage. Not all children achieve such emotional maturity, however. There are barriers that block the path of development. Two of the greatest dangers to normal progress we shall now examine, namely, *fixation* and *regression*.

Fixation describes a condition in the life of a child wherein his affection is so largely focused upon one person that he is incapable of satisfactory adjustments apart from that person. Thus, for the child to develop an emotional fixation at any point

in his development is for him to become rooted at that level, so that he has no desire to mature further. If the child does advance from stage to stage of emotional progress, there is still another danger with which he has to reckon. As he leaves one level and seeks to enter upon the next, he may find it so uninviting that he falls back upon the previous one. This retreat to a more infantile phase of development, as the result of some rebuff, is known as *regression*. Thus a child's emotional growth may be hampered in either of two ways: he may be held back (fixation), or he may be pushed back (regression). Let us see how these two mechanisms operate in actual experience.

A child's mother is his first love, and she may stay his only love if she exploits this early dependence of her child upon her. She can keep him forever from growing up emotionally. She can make him reliant upon her for his every need. She can continue to do things for him long after he ought to be doing these things for himself. If she is not happy in her marriage, she may throw the whole strength of her emotional life into her relationship with her boy. When it is time for him to assume new and wider interests he will fail to do so; instead he will live only to adore his mother. Mary Buell Sayles tells of such a boy, Ireck, in her book *The Problem Child at Home*.¹⁷ At sixteen he was still sleeping in the same room with his mother. "When he was eleven she discovered that he had been smoking and told him she would die if he continued; he never smoked again." (p. 31.) In all probability Ireck will not marry so long as his mother lives. However, should he do so, his marriage will fail unless his wife is a replica of his mother.

We have exemplified fixation; what of regression? Paul's case is in point. He is eight years old, and anxious for the companionship of his father. His relation with his mother has been normal. She would be glad to relinquish to her husband the place of primacy which she has long held in Paul's affections. But Paul's father lacks the qualities that make for being a true dad. He drinks excessively, beats his wife, shirks his economic responsibilities, and ignores Paul. It is pathetic to see Paul longing for the companionship of a father and yet shrinking

¹⁷Sayles, M. B., *The Problem Child at Home*, Commonwealth Fund, Division of Publications, New York, 1928.

from the sort of father he has. He will turn back to his mother again and center his affection in her. He will regress.

Regression, like fixation, may transpire on any level of development. The "home-sickness" of the boy or girl who goes off to school and who fails to make a satisfactory adjustment to the new situation is an example of regression which is common. In the case of the girl, the third phase of her development (the father-phase) is fraught with opportunities for regression. As the girl comes into the physical maturity of adolescence, she naturally turns to her father, who for a time is her first beau. Should he be lacking in the qualities of desirable fatherhood, should he disappoint her, the disillusionment she feels may be sufficient to drive her back to the level from which she has just emerged. From this time on she may reject the attentions of men, and live her life primarily in association with members of her own sex. It is therefore important that each step in the child's progress be made attractive and acceptable to him or her, if regression to a former level is to be avoided.

In the matter of affection, the golden mean is indicated as the desirable course for the guardians of children to pursue. They should love the child sufficiently to provide him with a sense of confidence in the essential goodness of life; but they should love him wisely, so he can another day qualify for independent action and a wholesome love-life of his own.¹⁸

V. Subsequent Discussion

Emotional health is the product of the proper development of the feeling side of the child's personality. Yet it is conceivable that a child may possess emotional health and yet be maladjusted socially. Thus the immigrant child, upon his arrival in a new country, may possess a strong body, a keen mind, and a well-integrated emotional life, yet be not oriented to the specific social situation in which he will have to function. Social adjustment involves all of the elements of strength that he shows, but it involves also living like the people about him, learning

¹⁸This matter of "social weaning" is more fully treated in the chapter on "The Child and Family Experience." See also White, W. A., *The Mental Hygiene of Childhood*, Little, Brown, Boston, 1927, p. 74.

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their standards of conduct, adjusting to their special customs. The social development of the child is the topic which concerns us next.

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(Chap. III: "Mother Love," p. 69—What are the ill-effects of too much mother love? Do you agree with the writer? Why?)
(Chap. IV: "Rage," p. 88—How do we induce rage in children? List irritants.)

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(Chap. V: "The Over-Anxious Child [Fears]," p. 213—Give a brief digest of Jim's case. Summarize the treatment recommended.)

CHAPTER VII

THE SOCIAL DEVELOPMENT OF THE CHILD

"Whosoever is delighted with solitude is either a wild beast or a God."
—BACON

I. Introduction

We have three main matters before us in this chapter. After preliminary discussion, first, of the significance of social life for the child, we shall observe that the child's social development proceeds along two essential lines: the growth of gregariousness and the acquisition of social personality. The balance of the chapter enlarges upon these two aspects of the child's social development. That is, we shall consider in detail, second, the extension of social consciousness in the growing child, and, third, the process of his socialization.

II. Significance of Social Life

When at birth the child makes his debut into the society of men, a double distinction is conferred upon him. Human association favors him in two ways; first, so long as he lives, he will have contact with his fellow mortals; and second, he will be transformed by the civilization into which he has come. Society thus means two things to the child, association with men and induction into modes of civilized living.

Both these aspects of the child's participation in the life of the group give uniqueness to his development. Unlike certain animals of this earth, he achieves sociability. That is, he enjoys the company of his own kind and passes his life in fellowship with them. In this respect he differs from the solitary

eagle and wolf; he does not travel alone. More important still, as the result of his social experience, the child takes on the characteristics of a civilized creature. He learns a language, he assumes dress, he acquires a religion, he achieves manners and morals. In respect to the acquisition of these things, he is unlike all animals. There are creatures other than human beings who live together in groups, but the young of the human race are alone in their rich social inheritance of culture.

How vital for the life of the human child is social experience? It is the signal factor in his development. If he were deprived of association with his fellows, he would perish, for nature has not provided him with resources for independent survival. But let us imagine he is nurtured by the animals of the forest, that he continues to live. What sort of being would he then become? He would utter cries for his needs, as do the beasts, but would speak no tongue; he would go naked, as they do; raw meat would find a place in his diet; he would live as men did live thousands on thousands of years ago, in the period before the first step was taken towards the building of civilization. Although there are certain accounts which tell of children supposedly matured in isolation apart from the rest of mankind (the so-called *feral* children, Casper Hauser, the "Wolf-children of India," etc.),¹ they seem almost incredible to us, so completely have we identified human existence with civilization. In truth, there is no humanness without human association.

However, human society and human culture are not only boons for the child; they are exacting considerations which he must take into account in his development. Nothing besides is so consequential for his happiness as the *adjustment* he makes to his social situation. He must orient himself with reference both to his fellow men and to the patterns of civilization which they embrace. He must get on well with his neighbors, and he must adopt and respect their folkways. The central fact in his living, about which all else rotates, is social adjustment.

The physical, mental, and emotional aspects of the child's development are essentially individualistic and personal; but his social development is a matter of group relations. To be

¹For a full account see Small, M. H., "On Some Psychological Relations of Society and Solitude," *Pedagogical Seminary*, VII:32, 1900.

sure, the physical, mental, and emotional elements of growth are factors in the child's adjustment to others. If he is taken with an infectious disease, he will be isolated from his associates; if he suffers the intellectual confinements of idiocy he will lack the wit to adjust sensibly to his circumstances; if he is emotionally unstable or neurotic, he may prove to be a trying companion. But it is not true that the child who reveals a handicap in any of these aspects of life must necessarily fail of proper social adjustment. Helen Keller stands out as a conspicuous example of the possibility of superior social adaptation in the face of the most extreme physical limitations. Neither is the converse of the last proposition valid; normal health, mentality, and emotional life do not assure their possessor of a normal accommodation to organized society and its requirements. In his study of one of the most conspicuous forms of social maladjustment, namely, juvenile delinquency, Healy estimates that about 86 per cent of all delinquents are mentally normal;² Burt, another investigator, reports more than 90 per cent of his cases as being without mental stigmata.³ Both authorities indicate the number of instances wherein emotional irregularities obtain to be even fewer. In brief, a child may have substantial health, sound emotions, and a splendid mind, and be a superior social scoundrel.

How may the child achieve desirable social adjustment? Through learning of the proper sort. The child at birth gives no intimations of the kind of adaptations he will finally achieve; at the start of life he is a-social, even anti-social. He has no specific interest in his fellow human beings and he cares no more for the intricate system of customs and traditions which they call civilization. The child must learn to participate in the life of his fellows; and he must be taught familiarity with, and conformity to, their culture. In the course of his development these two processes operate constantly. On the one hand, his experiences arouse within him a progressive sense of social consciousness, which brings him into closer and yet more extensive touch with his associates; on the other hand, he becomes increasingly socialized, as he comes under the dominanee of

²Healy, W., and Bronner, A., *Delinquents and Criminals*, Macmillan, New York, 1926, p. 151.

³Burt, C., *The Young Delinquent*, Appleton, New York, 1925, p. 285.

the prevailing concepts of the right and the proper. We shall give attention to both these aspects of the child's social development.

III. The Extension of Social Consciousness

Of what is the new-born babe aware? Of what is he conscious as he lies in his cradle? The fertile imagination of William James supplies the belief that the "baby, assailed by eyes, ears, nose, skin, and entrails all at once, feels it as one great, blooming, buzzing confusion." This vivid conception suggests the restriction of the child's consciousness to his own state of being. The child at birth is aware only of himself. He takes no recognition of the world outside. He has found himself, and he is fascinated by his discovery, to the extent that he devotes himself assiduously to the exploration of his own body. If he shows any consciousness of life apart from his own, certainly that awareness is inchoate, incipient. And, so far as perceptions of his relations to human beings are concerned, these are entirely lacking at this time.

From this stage of awareness of self only, the child passes to the level of undifferentiated consciousness of persons and things. At six weeks the child distinguishes between self and non-self. He senses the presence of reality apart from himself. But even yet, there exists no social consciousness. He does not respond to persons as such. Charlotte Buhler's experiments show that the very young child does not differentiate between animate and inanimate objects.⁴ To the sound of an aluminum pan being struck he reacts as he does to the sound of the human voice. This inability to discriminate between persons and things thus characterizes the second stage of his development—a stage which, though it emerges early in the life of the child, continues to have influence for a number of years to come. Ethel Verry, of the Iowa Child Welfare Research Station, observed children between the ages of two and four "treating persons as objects."⁵ It is not uncommon for a youngster at this time in his life to pluck another child's toys from out his hands and then show

⁴"The Social Behavior of the Child," *Handbook of Child Psychology*, Edited by Carl Murchison, Clark Univ. Press, Worcester, 1931, p. 392.
⁵Baldwin, B. T., and Stecher, L. I., *Psychology of the Pre-School Child*, Appleton, New York, 1924, p. 235.

evident surprise at the child's resistance. Behavior of this kind clearly indicates the slowness with which the child comes to realize the difference between the animate and the inanimate.

At the age of two months, there come into evidence the first beginnings of actual social consciousness. Now the child shows that he can tell human beings apart from other things. A *smile* is his evidence. Other things receive their wonted reactions from him, but he reserves the smile for human beings. Human voices and human faces evoke it, irrespective of tone or expression. A harshly spoken word will win a smile as readily as one that is kindly put, and a scowling face as easily as a radiant one. Interestingly, too, the infant confines his smiles to adults. He does not show the same attention to little children. It is not uncommon to find babies four and five months old consistently disregarding each other when placed in close proximity to each other. The little child's social relations thus begin with his awareness of the adults in his environment.

It is not difficult to understand why the child's first social perceptions should be for adults. It is they who supply his wants; therefore, it is they with whom the child associates his feelings of satisfaction. He rewards them with his first sign of social recognition, a smile. Later, at three months, he introduces his second essential sign, a special sort of cry. He has, of course, cried earlier, but this was in order that he might make known his needs. At three months, the cry for *attention* comes forth. His previous cries for help have been answered by adults, and the responses have been most satisfying to him. He has learned to delight in the sheer act of being attended to. The new cry for recognition is clear evidence of his growing regard for human association.

Next the growing child takes his peers into account. He becomes companionable with other children. Sometimes at six months, generally by the first year, infants react to each other. They may touch each other, handle each other's clothes, fingers, or toes. They may make agreeable sounds in each other's presence, and exchange smiles.

The gregariousness of one-year-old children is qualified in a striking way. Their capacity for social contact at any one time is limited to a single association. A child at this time can sus-

tain social relations with but one child, even though more than one may be present. At eighteen months, the child shows a capacity for play in groups of three, although his preference for a single companion remains. Until he is three years old, he will show a decided predilection for the society of but one child.

Further development of social consciousness in the child proceeds along three lines. First, the child's progress illustrates the principle that the size of his groups increases with his advance in years. Throughout the pre-school period, his groups are small. It is uncommon to find children under six years of age in groups of more than five. Second, the length of the interaction period is likewise extended with the child's advance in years. Buhler found that young children seldom continued unbroken contact with each other for more than twenty minutes. Six-months-old children when in each other's presence react to each other through touch, and vocalizations, and smiles, but for a brief period only. There are intervals of mutual indifference. More persistent association results from the introduction of an object or activity capable of becoming a common interest. Bare interest in each other's selves will not sustain a relationship between two little children. They must have an object, for example a toy, upon which the attention of both may become focused. Curiosity later provides such a stimulus for the maintenance of social relations.

A third significant change in the nature of the child's social response is his movement towards *intimate* association with other children. The early contacts of the child are most casual; the first bonds of acquaintanceship are easily broken, and without feeling. Until the child is about eight years old, a definite nonchalance pervades his social life. Now a new episode in his social history opens. He becomes gang-minded. The unique element of allegiance is introduced. The child now feels an intimate attachment for a social group. As he grows older, the child shows this same sort of intimate regard for a few friends; and, when he reaches adolescence, he limits himself to one friend in particular. So we may say that during the last phase of the development of his social consciousness, the child shows the tendency to build up close associations, then to restrict their number.

IV. The Process of Socialization

The child not only mingles with members of his race, but he comes under their dominion, and under the dominance of the prevailing culture. Society makes a double claim upon the growing child. First, he must adopt certain fundamental group customs. If a Roman, he must do as the Romans do. He must take on their habits of language, dress, food, play, and the like. Briefly, in certain fundamental ways he must become *like the rest* of his associates. If, at any stage in a child's development, his progress in the acquisition of these fundamental culture patterns does not approximate the average achievement for his age, we say he is socially maladjusted. Second, we expect the child also to become *like the best* of his social group. Every society supports standards of conduct—rules, principles, ideals, sentiments—the observance of which it seeks to enforce upon its members. If the child does not conform to the social standards by which we judge him, again we say that he is unsocialized. *Social skills* and *social standards*: socialization calls for both.

Let us examine in some detail an example of each of these two aspects of the socializing process. Let us consider a single social skill, the acquisition of which helps to equip the child for association with his brethren, and one social standard by which we wish him to abide in the interests of a wholesome society. For the first purpose, we shall treat of the child's progress in the use of language, and for the second, the cultivation in the child of respect for the truth, or the principle of honesty.

1. Language as a Social Skill: The Development of Speech

In the process whereby the child is transformed from an unsocial creature into a member of civilized society, no element is more important than his acquisition of language habits. Only through speech may the child enter into the fullest communication with his fellow human beings. Language, by supplying common symbols, makes it possible for men to live a common social life and to appreciate the elaborate products of civilization which have been objectified so largely in the form of words. Hence it is appropriate for us to single out speech for special

consideration and to trace the process whereby the natural utterances of the child at birth are converted into the intricate expressions of language.⁶

Early vocalizations. The child is his own herald; he announces his entrance into the world with a cry. Thus the child reveals at the outset his sound-producing possibilities. His early vocalizations are confined to squalls or *reflexive cries*. These sounds he makes are native, simple and specific. They express basic needs he wishes to have gratified, or difficulties he would like to have removed. They reflect the presence of emotion. At first it is fairly impossible to distinguish the nature of the emotion which the cry represents, but soon the vocalizations become sufficiently differentiated to enable one to tell against what distinct difficulty the child is registering his protest. There are the fundamental cries of hunger, pain, fear, and rage.

The next intermediary stage in the pre-language progress of the child appears with *babble*. The early reflexive cries we have just considered are occasional, and in response to fundamental physiological needs. They, therefore, serve a purpose; they are aids in the fight for survival. Now, with the appearance of the babble, we observe vocalizing for its own sake. Allport⁷ explains babbling by means of the circular reflex; that is, the production of each sound by the one that went before it. It is clear that this level represents a distinct advance in sound development. The child likes the sound of his own voice, and engages in what we might call vocal-play.

From the babble the child ordinarily progresses to the production of *articulate sounds*. There is not the loose, random flow of tone which marks the babbling, but instead the clear, specific enunciation of combinations of vowels and consonants. The first consonants to be expressed are usually *m*, *p*, and *b*; and after these labials, the gutturals, dentals, and nasals appear. This period is characterized by progress in voluntary control over the organs of speech.

Next comes the period of the child's *imitation of the intonation and inflection of adults*. Here we have sound response

⁶Cf. McCarthy, D., *The Language Development of the Pre-School Child* (Institute of Child Welfare Monograph Series, No. 4, Univ. of Minnesota), Univ. of Minnesota Press, Minneapolis, 1929.

⁷*Social Psychology*, Houghton Mifflin, Boston, 1924, p. 181.

to sound. The infant's mother speaks to him, and is surprised to hear him repeat her intoned syllable in a pitch which approaches the one she used. Since this is the first indication the child has given that he is conscious of the speech behavior of others, this period may be regarded as the initial social stage of language development.

Language comprehension. A great forward stride is taken when the child shows, not only that he responds to the sound of the spoken word, but also that he understands it. According to the Blantons,⁸ the average child gives his first indications of word and gesture comprehension when he is about seven months old. He understands the meaning of words before he develops the capacity for using them himself. The average one-year-old child is capable of comprehending "simple verbal commissions" and is able to wave "bye-bye." The child shows his understanding of the sense of words by making simple adjustments in response to them. Because comprehension of language comes to a child before use does, care must be taken not to keep him upon the earlier level through accepting it as the terminal of progress.

Use of language. It is a short step, yet an all-important one, which the child takes from an appreciation of words to their utilization. The transition occurs at the time of the first spoken word, about the tenth month of the average child's life, according to McCarthy. The Blantons make a distinction according to sex, this age period for girls being nine to eighteen months, as against twelve to eighteen months for boys. The first word is recognized as such when it combines both structure and function; that is, when an accurately formulated sound is properly associated with its appropriate situation. Ordinarily the first word spoken by a child will be the name of an object, person, or situation familiar to him; usually, too, it will be a monosyllable, or a repeated monosyllable such as *da-da* or *bye-bye*.

Once language use has begun, further development will consist of the building up of vocabulary and the acquirement of grammatical constructions. In this progress, a decided step is taken when the child achieves the ability to use *single-word sentences*. Such words are, for instance, "yes," "no," and

⁸*Child Guidance*, Century, New York, 1927, p. 96.

"go." Gesell lists "hello" as being within the speaking power of the average eighteen-months-old child. Thus a single word, supported often by special intonation and gesture, marks the child's introduction to grammatical speech.

Further grammatical progress is obviously dependent upon the child's acquisition of a vocabulary. His achievement along this line during the pre-school period is nothing short of phenomenal. When one year old he has just begun to use words. By the time he is two, his vocabulary has reached two hundred words, about half of which are nouns. By the time he is five, he has a stock of about two thousand words, and uses every variety of sentence—imperative, interrogative, explanatory, etc. From the infant's simple one-word sentence, he advances to the two-word sentence of noun and verb; from mere "drink" he moves to "baby drink." Then come qualifying adjectives, and clauses, and the rest. With increasing age there goes increasingly complex sentence structure. By the time he is ready for the first grade of school the child has what amounts to a basic command of his native tongue.

Suggestions for stimulating language development. We begin with the reminder that speech has to be learned. The child is by nature endowed with the capacity to make sounds; he has the physiological bases for speech. Language, however, is an artificial product, the cumulative social invention of many people. If the child is to learn to use it, he must be brought into contact with it properly. Of what does such a desirable introduction consist?

If the child is to gain command over the spoken word, he must in the first place actually hear language spoken. Speech clinics report that not infrequently the retarded language development of children is assignable to the absence of speech in their lives. Strong, silent men do not make good fathers in this respect. The child must have experience with language. Besides, we can hardly expect that he will learn to use language adequately if he is not from the start given proper examples by which to go. He must hear not merely language, but suitable language. By this test, so-called "baby talk" is discredited. It needs to be remembered that, in regard to speech, the child is supposed to imitate the adult, not the adult the child.

Second, the child requires for proper speech development an opportunity to use speech as well as to hear it. The child's tendency to resort to communication by gesture may become fixed, because the child finds it easy thus to indicate his meaning. Gestures are good accessories to speech, but they must not be admitted as substitutes for it. If he resorts to them alone, adults should pretend not to understand him. The use of actual words should be required. It is good technique to make the child talk to get the things he wants. Worse than silent parents are those who never keep still; those who give the child no opportunity for speech; those who do his talking for him. Specifically, instead of giving the child his glass of milk and saying, "This is milk," it would be better to accompany the gesture with the question, "What is this?" Interrogations are better than statements because they stimulate response from the child. It is good practice, further, to reward the proper reply when the child makes it. In this case, the reward would consist of the child's being supplied the milk he desires. In other cases, the reward may consist of an evident display of satisfaction on the part of the adult over the child's response.

Language is but one of the social habits which the child acquires in the course of his social development. Those who work with children should study similarly the development of proper habits of eating, walking, dressing, and the like. Each of these activities presents its peculiar problems as the child develops adjustment in point. Adjustment in each case calls for the upbuilding of specific tendencies which are in keeping with the folkways. Social habits comprise the first phase of the socializing process.

2. Honesty as a Social Standard

We have still to consider the second aspect of the child's social adjustment. As we have already indicated, his social orientation includes, in addition to the acquisition of proper social skills, the attainment of *socialized attitudes* and *social standards*. Since group life consists of relations between human beings, most of the desirable attitudes and standards which we seek to inculcate in the child relate to his acquirement of proper respect for other persons—their needs, interests, and activities.

We disparage gossiping because it does not respect the privacy of others; we denounce pugnacity because it does not respect the peace of others; we deprecate stealing because it does not respect the property of others. There are fairly countless social standards which society sets up to promote the harmony and dignity of social life. We shall choose for intensive consideration the principle of *truthfulness*. It is one of the most representative of standards, and at the same time one of the most fundamental.

The prevalence of deceit among children. How commonly do children tell the truth? What is the incidence of lying among them? In one experiment, Hartshorne and May⁹ used a random sample of 265 grammar-school children. These children were subjected to a battery of 21 character tests, offering strong incentive to deception. There was not a single score of perfect honesty in the lot. To another group of children they gave a group of only ten tests, covering less complex adjustments; here the temptation to deceitfulness set up by the assigned tasks was not so great. In this study, 7 per cent of the children were perfectly trustworthy. All the others showed degrees of deception.¹⁰ Similarly, it was necessary for Slaughter to cover the school population of three communities before he could locate approximately 35 children who would tell the truth three times straight in the face of three distinct opportunities to lie, and 35 others who would prevaricate on all three occasions.¹¹

Data such as these permit of certain inferences. First, the conclusion is forced upon us that lying among children is widespread. Second, it appears that there is no clear-cut distinction between liars and non-liars. The trait of truthfulness is not rigid and invariable. A child may be utterly truthful in one situation and utterly deceitful in another. Third, for the most part a child's veracity depends upon the number and kind of occasions in which he is tested. If the situations are simple, and the temptations to lie not strong, a child may tell the truth; but

⁹*Studies in the Organization of Character*, Macmillan, New York, 1930, pp. 480, 486.

¹⁰*Studies in Deceit*, Macmillan, New York, 1928, Book I: 386; Book II: 220.

¹¹Starbuck, E. D., "Character Rating," *Child Study*, IX: 12, September, 1931. Reprinted by permission of Child Study Association of America.

the same child may be moved to falsehood when the situations carry strong inducement for him to stray.

The bases of children's lies. It will be helpful to view the falsifications of children as resting upon four bases. These are all of a conflict-nature, even as truth and untruth are themselves in opposition: (1) conflict of understanding; (2) conflict of group teachings; (3) conflict of social principles; and (4) conflict of personal desires.

1. *Conflict of understanding.* The child's lack of truth-telling often proceeds from his unfamiliarity with the nature of reality. Children do not at the outset differentiate between the actual and the imaginary. In fact, young children think all things to be real. Fairies are real, Santa Claus is real, the "bogie-man" is real. A young child, for example, insisted upon the truth of his statement that Joe, the fat boy of the inimitable *Pickwick Papers*, was a real person. When asked to account for his belief, he said that Napoleon was real, that he had seen him in a book; so, too, had he seen Joe in a book and so was Joe real, too! In this case, the child's confusion had some contact with reality. However, the young child often spins ideas solely out of the stuff of his imagination. He invents companions; he gives them destinies; he lives in close touch with them; he represents their actions to adults as if they were real.

In a strict sense, the child's misunderstandings of fact can hardly be called lies. A person lies only when he knowingly goes counter to the facts which are at his command; true deceit is thus intentional, not accidental. All his life the child will continue to determine with increasing discrimination what are the facts of life; and all his life he will continue to suffer from some measure of confusion as to their nature.

2. *Conflict of group-teachings.* The child's confusion over the nature of the actual world is worse confounded by the agencies to which he turns for direction. He looks to the social groups which surround him in his daily living for his standards. And he finds, in this complex world, that the patterns of conduct which they represent to him are not in complete agreement. The family circle, the church, the school, the law, the movies, the press, the gang—these influences in his life do not present a united front. If the child could but analyze these

agencies and the facts and ideals which they champion, he would discover two essential things concerning them: first, they are not congenial with one another; second, they are not even individually self-consistent in their teachings.

3. *Conflict of social principles.* The child's adjustment to the problem at hand is greatly complicated by the fact that social principles get in each other's way. It is not always a question merely of truth versus falsehood, but often of truth versus loyalty, or courtesy, or gratitude, or service. There are many values of moment in this life all competing for supremacy. It may be that truthfulness under certain circumstances is a lesser virtue. When a friend greets us with: "Good morning. How are you today?" we falsify the facts if we are not in good health, for the sake of propriety. What shall a child do if the telling of the truth means that the happiness or safety of his best friend will be brought into jeopardy? Shall a child lie if it appears necessary to him to do so in order to serve the interests of a play-mate? Socrates long years ago raised this same question as to the relativity of values. He postulated the circumstances of a child sick almost unto death; the child can be saved only through his taking medicine which is deeply obnoxious to his taste; he will refuse it if he is told what it is. Are those responsible for the child's life justified in lying to him? This problem confounded Socrates. Then how much more confused must a mere child be by this competition of social values.

Here is a typical instance in point in our own day. An adolescent daughter, *S*, smokes cigarettes. Her mother does not approve, but tolerates it. However, she says to her daughter, "If you wish to smoke, I shall permit you to, but you must by all means smoke in private and keep the knowledge of your smoking from your grandmother." *S* knows that her grandmother, who lives with the family, strongly disapproves of cigarettes, and will be deeply hurt if she discovers the truth about her own granddaughter. At home, the conversation often turns to the question of women and their use of tobacco, and not infrequently the grandmother remarks, "But not my little *S*, thank goodness." *S* does not correct the misimpression. Regard for her grandmother competes with her sense of veracity.

4. *Conflict of personal desires.* The child would more often tell the truth if by so doing he could gain the things he very much wants. But too frequently it appears to him that he can realize his desires only through prevarication. On the side of positive expression, the child will many times lie in order to make a better impression upon his associates. If he wishes additional social recognition, and does not think to achieve it by socialized means, the child may falsify the facts to gain his end. Abigail Hardell¹² behaved in this way. She was an attractive adolescent girl who longed to be popular. She would bring to school, so that her classmates might see them, bouquets of flowers which she herself had purchased, and tell the tale that they had been presented to her the evening before at a party given in her honor. She told of the high achievements of her parents and relatives, who had actually achieved little. Her large-scale lying reflected her desire for social approval, and constituted compensation for her sense of social inferiority.

On the side of negative expression, we observe a great deal of lying done by children in an effort to extricate themselves from critical social situations. This is commonly known as "defensive lying" and probably represents the variety of greatest incidence. Fear of the probable punishment for wrong-doing ordinarily impels the child to misrepresent his situation. He will say he knows nothing about the cookies that disappeared from his mother's pantry, when he is questioned about his knowledge concerning them. He hides from one offense by the commission of another. Obviously if the threat of very severe punishment for minor misdeeds hangs constantly over the child's head, he has strong motivation for defensive lying.

Suggestions for cultivating truthfulness. For one reason or another children tell lies, but tell lies they do. There is an overwhelming amount of deception among them. We have already alluded to the Hartshorne-May study, in which not a single child out of several hundred achieved a perfect honesty score, and in which almost 50 per cent obtained a negative rating. Coupled with this condition there is a second disheartening one; the situation does not remedy itself. No evident increase

¹²Healy, W., and Bronner, A., *Case Studies*, Judge Baker Foundation, Boston, Case 12.

in degree of truthfulness accompanies the child's increase in years. In fact, the evidence does seem to show that, far from there being any improvement in this regard, children on the whole become more deceitful as they grow older. One investigator, Slaght, discovered among older children a tendency to condone bad behavior of which earlier they disapproved.¹³ In view of both the widespread existence of untruthfulness among children and the fact that this problem does not clear up of itself, suggestions for the cultivation of truthfulness in children are appropriate.

In the cultivation of an attitude of honesty towards facts two things are required: first, a knowledge of the facts, and second, a desire to acknowledge them. The child must know what is true, and he must wish to speak it. Our suggestions will therefore relate to these two matters.

1. The child needs to be made acquainted with the nature of facts. The Blantons distinguish three kinds of facts with which adults deal, and urge that the differences between them be made clear to the child. These categories are: known facts, fictions, and superstitions.¹⁴ It is possible further to simplify the classification into the two groups of the real and the unreal. Even a superficial knowledge of a child's ways confirms the observation that he often confuses the real with the fantastic. Unless taught otherwise he will regard fairies to be as real as the people about him. All the characters of the make-believe stories which are told him will seem substantial to him, unless he is told better by adults.¹⁵

As the child grows older, his parents have still to guide him in his perception of the real. In a complex world, where the child feels the impact of divergent and contradictory influences, his thinking must be integrated into a substantial unity by his guardians if it is not to become utterly disorganized. This can be done through making an honest effort to consider with the child the reasons for the prevailing confusion

¹³Slaght, W. E., *Untruthfulness in Children*, Univ. of Iowa Press, 1928, p. 79.

¹⁴Blanton, S. and M. G., *Child Guidance*, Century, New York, 1927, pp. 266 ff.

¹⁵See Krout, M. H., *The Psychology of Children's Lies*, Badger, Boston, 1931, Chaps. III-V.

in our social thinking. If the divergent teachings of social groups are explained to him, for example, in terms of the special and individual interests which these groups represent, the child may be made critical of them.

2. The child needs not only to know the facts, but to respect them. How develop the *désire* to tell the truth? Make the truth attractive to the child. It should be a source of much satisfaction for him to say what he believes to be true. To establish such positive motivation, we must early begin to reward the telling of the truth.

Rewards for good behavior may be of two kinds, material and immaterial, and it is important to inquire which it is better to utilize. The preponderance of studied opinion on this subject questions the wisdom of material rewards. Too frequently the child loses sight of the value of virtue in his emphasis upon the material object. He tells the truth only that he may gain the coveted prize. If he discovers what he believes is an easier way to win the award, albeit it is dishonorable, he may pursue it. Studies show children cheating in order to win medals for honesty.¹⁶

To the present time, insufficient stress has been laid upon immaterial factors in the production of virtue in children. It is desirable that a child should speak the truth because he enjoys the commendation of his associates and their good opinion of him. Here we have the best type of reward. If the child truly cares for a certain person, there is nothing which he can be made to cherish more than the esteem in which that person holds him. Praise for good conduct might well be made emphatic and invariable.

3. More than anything else, the child needs practice in truth-telling. He must have occasion for the exercise of his virtue. The reasonableness of this statement appears with the observation that the child's idea of truthfulness at any given time is merely a composite of the truthful responses he has made up to that time. The laws of learning apply to the matter of social standards as fully as to the acquisition of other skills.

¹⁶Dimock, H. S., and Hendry, C. E., *Camping and Character*, Association Press, New York, 1929.

First, there is untold value in the child's having the experience of telling the truth in as many different situations as possible. It will be recalled that children who have had no special guidance in moral education (that is, the usual run of children) will tell the truth on certain occasions and prevaricate on others. Therefore, the more numerous and unique the situations in which he is taught to speak the truth, the better for the child's moral development.

Second, concrete experience with truthfulness in a multitude of instances needs to be supplemented by generalizations. This will help to make clear the application of the social standard to new situations. Specifically, if a child has just spoken the truth, or been a party to the observance of a situation involving veracity, it is decidedly worthwhile to generalize on the basis of this experience, and to point out the value of similar conduct under other circumstances. Ruediger tested out this principle in regard to the cultivation of neatness in school children. In a previous experiment a group of children had been drilled in neatness in the writing of arithmetic papers, with no mention being made of the value of orderliness in other activities. As a result the children so trained achieved neatness in the composition of arithmetic papers, but failed to show any improvement in their care of other matters. Ruediger repeated this experiment, except that he took pains to stress the value of neatness in other departments—dress, classroom, etc. He found that, although the greatest improvement in neatness occurred in the subject with which he was directly occupied, betterment in this trait was noticeable in the other fields as well.¹⁷ It appears that much is to be gained through generalizing upon the child's social experience.

V. Sources of Socialization

We have regarded the content of the child's socializing experience; also we have considered ways and means for producing the socialized child. We have still to observe the sources

¹⁷Ruediger, W. C., "Improvement of Mental Functions Through Ideals," *Educational Review*, 36:364, 1908.

of the child's social attitudes. Every child develops social standards of one sort or another. Whence do they originate? What forces are most influential in bringing them into being?

Hartshorne and May undertook to answer these questions.¹⁸ It occurred to them that they might be able to estimate the relative strength of the forces operating in the life of the child. For such study they chose the child's parents, his friends, his club-leaders, his day-school teachers, and his Sunday-school teachers. Their working hypothesis was this, that the relative influence of these persons upon the thinking of the child could be estimated from the degree of correspondence existing between the child's thinking and theirs. For example, if it were discovered that parents and their children do not agree upon the importance of fundamental social standards, it would be reasonable to assume that parents do not greatly influence, positively, the social development of their children. In the investigation, a large number of children were tested as to their ideas of right and wrong, and the results correlated with the scores of the children's associates, as follows:

Child and his parents	.545
Child and his friends	.353
Child and his club leaders	.137
Child and his day-school teachers	.028
Child and his Sunday-school teachers	.002

For purposes of interpretation of these data, it is necessary to add that a perfect degree of positive correlation would read 1.000; a perfect degree of negative correspondence, —1.000.

What do these figures show? Briefly, they suggest there is no relationship worth mentioning between the standards of Sunday-school teachers and the children to whom they minister. As for day-school teachers, they exert but a negligible influence upon the child's ideas of right and wrong. Club leaders entertain concepts of social propriety which only slightly resemble those of their followers. As between the social thinking of children and their chums, however, there is a marked degree of correspondence, and the greatest harmony of judgment exists between children and their parents.

¹⁸ "Testing the Knowledge of Right and Wrong," *Religious Education Association, Monograph No. 1*, pp. 47-48, 1927.

VI. Subsequent Discussion

As the child develops into a social being, he assumes interests and engages in activities. These interests and activities are determined for him by the social groups to which he belongs. It is logical, therefore, that we should next concern ourselves with the more prominent interests in the life of the child.

From the data cited above, we are led to believe that the two social interests which most influence the process of the child's socialization are the family and the play-group. Accordingly we now proceed to a discussion of the child and his family experience.

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(Chap. XIV: "Juvenile Delinquency," p. 296—What are its chief bases?)
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(Chap. XII: "Learning to Adjust to the Group," p. 164—How important are playmates for the development of group-feeling in the child?)
(Chap. XIII: "The Laws of Discipline," p. 182—What "principles" are given?)

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9. Groves, E. R., *Personality and Social Adjustment*, Longmans, Green, New York, 1931.
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- (No. 12: "The Social Behavior of the Child," p. 392—Describe the 3 types of social behavior in babies; the 3 types of leadership.)
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(How do the boys differ from the girls in their social attitudes? Where are both weakest? How account for it?)
 19. Thomas, D. S., et al., *Some New Techniques for Studying Social Behavior; Child Development Monograph No. 1*, Columbia University Press, New York, 1929.
(List the procedures and describe, briefly, the one you regard as most promising. What advantages do these have over "old" methods?)
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(Read Chap. I: "A Day in the Juvenile Court," p. 9—With what new impressions does this account furnish you? What is its relation to socialization of personality?)

PART III

SOCIAL EXPERIENCE

CHAPTER VIII

THE CHILD AND HIS FAMILY EXPERIENCE

"There ought to be no reason, and under happy conditions there is no reason, why the relationship between parent and child, as one of mutual affection and care, should ever cease to exist."

—HAVELOCK ELLIS

I. Introduction

In our study of the child and his family experience, four major matters will take our attention. First, we shall give thought to the significance of family experience in the life of the child. How vital is it for him? Can a substitute for an adequate home be provided? Second, we shall take account of the contribution which the family makes to the welfare of the child. With what does the home actually supply him? We shall examine the nature of family experience itself, to see how it functions in the life of the child. Third, we shall consider the nature of deficient parental functioning. Certain homes, when weighed in the balance, are found wanting. What are the shortcomings of these mothers and fathers? What stands in the way of harmony between them and their children? Fourth, we shall conclude our survey with an estimate of desirable parental functioning. How does the good home operate? What is the spirit and the substance of its ministry to the child?

II. Significance of Family Experience

We can show in two ways that normal family life is indispensable to the proper development of the child's personality. First, we need only to observe the advantages enjoyed by children who come out of any sort of home at all over those less privileged children who have been reared in institutions. One

of our most comprehensive studies of child life in recent years concludes its findings on the institutional child with the observation: "Institutional care for the most part has produced uninspired individuals poorly adjusted to the outside world."¹ Second, the power of the home is apparent in the finding of modern science that the best treatment for maladjusted children of normal intelligence consists of their placement in desirable foster homes.² A good home is the best medicine we can prescribe for a socially sick child.

On the positive side, we can say that a good home is the most attractive insurance against trouble with which we can provide the child. Studies in juvenile delinquency agree in showing a strong connection between bad conduct in children and their emergence from bad homes. Burt estimates that about 60 per cent of his group of wayward children come from *broken* homes.³ Healy, another investigator, reports that nearly 50 per cent of his group of 4,000 young offenders trace back to disrupted homes.⁴ Nor is this all the indictment which can be brought against undesirable family life. Broken homes are not the only bad homes. There are many families that manage to hang together, at the same time that they do violence to the lives of the members. Reviewing their 4,000 delinquents, Healy and Bronner come to the conclusion that only 7.6 per cent of the total number of children may be said to belong to "good" families. Nor do these writers make exacting demands upon a family in the criteria they set up for its qualification as "good." By a good family they mean simply one wherein constructive disciplinary forces operate.

III. The Nature of Family Experience

We must now see what the family actually does for the child, how, and in what ways, it serves him. To this end, it is helpful to think of the functions of the family as divisible into

¹*White House Conference on Child Health and Protection*, 1930, Century, New York, 1931, p. 134.

²Cf. Healy, Bronner, Baylor, and Murphy, *Reconstructing Behavior in Youth*, Knopf, New York, 1929.

³Burt, C., *The Young Delinquent*, Appleton, New York, 1925, p. 92.

⁴Healy, W., and Bronner, A., *Delinquents and Criminals*, Macmillan, New York, 1926, pp. 122-123.

four main groups: (1) control of environment; (2) inculcation of social values; (3) orientation; and (4) regeneration.

Control of environment. At birth, the child finds himself in a world which is in many ways hostile to him, and his family rises as his champion to shield him from the outer evils. It is the business of the family to protect the child against the pressures of the environment until he has been equipped with strength and skills with which to meet them. In two primary ways, a child's family controls his environment. The one is of a physical nature and the other social. The family, by its presence and by its ministrations, assures the child (1) *physical survival and security*, and (2) *social status*. Let us see what each of these assurances involves.

1. *Physical survival and security.* No creature is so incapable of self-care as a new-born babe. He has no means of keeping warm. It is a far cry from the child resorting to his own heating system to the babe in his basket, surrounded by hot water bottles and many blankets. Again, he has no means for feeding himself. If abandoned, he perishes. The Spartans systematically resorted to infant exposure as a means of eliminating weaklings from the population. But the family does more than keep the child merely alive; it keeps him secure against hunger, pain, and cold. The family feeds the child, clothes him, and provides him with shelter. It provides him with medical care when he is ill. It protects him against accidents and injuries. The family is thus a sort of buffer between the child and the antagonistic forces of life. The family relieves the child for the most part of the necessity of fighting the battle, and it stands ready to lend a helping hand when the child is drawn into conflict with the conditions of his life. The good home is a valiant defender of the child's security.

2. *Social status.* The child is born without equipage for the struggle of life, and he is born also without standing in the social world. Were it not for his family, he would be without identification. As it is, his family provides him with (1) a name and (2) a social position.

It is not difficult to grasp the importance for the happiness of the child of his being satisfied with his name. He ought to be pleased with it, or at least not annoyed by it. Modern

psychiatry clearly shows the devastating effect upon personality of constant annoyers, however slight they may appear to be to outsiders. A single bead of water dropping upon a person's head may seem to be a small matter; but we know that the ongoing of this experience was one of the most torturous punishments devised by the Inquisition. Now, a child is obliged to live a lifetime with his name, and if it annoys him, it may in the end do great damage to his personality. Certain names more than others have proved especially vexatious to children: Archibald, Percival, Aloysius, and others of this order. In his autobiography,⁵ for example, Clarence Darrow takes pains to refer to his given name as a "cross" which he was obliged to bear through the years. It would however be fallacious to think that harm can come to a child only from such names as these, whose dispopularity has been hallowed by time. Any name is the wrong name for a child to go by, if it constantly irks him. If a child finds annoyance over the name which has been assigned him, the sensible thing would be to allow him to select his own.

The child gains identity among his fellow mortals through his name; and he secures a social standing among them on the basis of the family from which he has sprung. The economic and social position of his blood relatives determines for the child his own social standing. We recognize this readily. If a child be one of *the* Cabots, or one of *the* Lowells, or one of *the* Rockefellers, his station in life will differ materially from that of a child who chances to be one of *the* Jukes, or one of *the* Kallikaks. The wealth and social position of a child's family determine what his initial place in the social world shall be.

Families need to be conscious of the need for providing the child with an acceptable social status. It would obviously be worse than absurd to urge all mothers and fathers to afford their children lofty stations in life. We know that altogether too many families live close to the danger line of poverty. For all this, parents can see to two things in this connection: first, that whatever the financial and social level of the family, they do not by their own attitudes lead the child to become ashamed of it; and second, that they exert themselves to avoid unneces-

⁵Darrow, C., *The Story of My Life*, Scribner's, New York, 1932, p. 11.

sary social humiliation for their children. Families are not to be blamed for their rating in the social scale; chance determines this for the most part. Besides, most parents do not have to be urged to do all in their power to enhance the social lot of their children; it is the natural inclination of parents to do so. But parents do need to be cautioned against too definitely creating in the minds of their children the rankling thought that other families are better advantaged, and therefore superior to them. In fact, the very determination of parents to see their children better stationed than themselves may make altogether too conscious in the minds of the children a feeling of social inferiority. Sensible parents do not stress the comparative financial and social standing of families; they devote themselves to the cultivation of all the inner resources their own family has to offer. They sponsor happiness within the home, come of full fellowship among the members of the family, rather than domestic discontent, born of invidious comparison.

Inculcation of social values. It is the family's function not only to provide the child with status in the social world, but also to equip him with resources for meeting the demands of life. Until quite recently, the responsibility for acquainting the child with the nature of his society fell entirely upon the family. In the rural culture that lately prevailed, almost all that a child knew he acquired from his parents. His home was his school. Today the home shares with other agencies the education of the child. The school has taken over a large share of the responsibility that before rested with the parents. But the home still retains important power over the educational destiny of the child.

For one thing, the home provides the child with fundamental *tastes*. It is interesting to note that however much food tastes may alter with the years, people continue to relish most those foods which were enjoyed at home in childhood and youth. Likewise, basic *attitudes* are engendered at home. One's true feeling towards such matters as sex, marriage, religion, and even life itself, more frequently than not, trace back to family experience. Also, the home furnishes the child with *mannerisms*. The inflection of his speech he often derives from his parents. The writer teaches in a section of Pennsylvania where the influence of the

home in this respect is most noticeable. Young men and women come to the university speaking English with a "Pennsylvania Dutch" accent. The whole division of conduct known as *manners* betrays family influence. A child's bearing, the way in which he conducts himself, the style with which he dresses—these and similar acquirements show clearly their source in the example of the home. To be sure, new influences outside the home exerted over a period of time not infrequently alter the earlier foundations. But the effects of the home are never effaced. As Bernard Shaw has shown in his play *Pygmalion* the manners which children derive from their parents have a way of revealing themselves, even when pains have been taken to keep them out of sight.

Orientation. If the school continues to make inroads upon the family domain, what functions will remain for parents to exercise? There need be no lamentations on the imminent disintegration of the family, for if the family loses hold at one point, it tightens its grasp at another. It is becoming increasingly clear that the prime service the family can render the child today has to do with his orientation in an increasingly complex world.

In this intricate arrangement we call *Society*, how shall the child know where to go? From out the multitude of agencies that stand ready to serve him, how shall he know which to choose? Never in the history of the family more than at present have parents needed to supply direction to the lives of their children. With increasing mechanization and urbanization of life, the child must find it progressively difficult to harmonize himself with the rapid change, confusion, and complexity which these trends produce. Life for the child becomes more and more like a vast labyrinth, wherein he readily loses himself except he be made acquainted with the maze by his elders.

Regeneration. In our consideration of family functions, we have passed from those which are of a material nature to those which are distinctly immaterial; from the provision of food, clothing, and shelter, to the guidance of the child's thought and action. Now we shall devote our attention to a category of family functions to which we assign the name *regeneration*, because these services of the home all tend to supply

the child with fresh vitality for the business of living. If we seek specifically to name the elements which make possible this renewal of energy, we find they include at least these two: (1) freedom, and (2) intimacy.

First, as for *freedom*, it is nowhere else to be found as in the family. Everywhere else, the child is under constraint of some sort. He must make a good appearance. But at home he can relax and be "himself." By engendering an atmosphere of peace, the home can provide the child with a freedom from tension that is essential to full recovery from the nervous tautness that results from his contacts with the world. Second, as for *intimacy*, family relationships provide it uniquely. The "personal touch" predominates at home. At school, John is merely a member of a "class"; at the theater, he is one of the "audience"; but at home John is *John*. Here he counts supremely, and the comfort of feeling that he belongs to his family in a distinctive way gives him spirit with which to deal with the more impersonal world outside. We have often heard it said that a man's home is his castle. It is his refuge from the world, where, through relaxation and affection, he may build up fresh power for daily living.

We have just outlined the ways in which the family may serve the child. Our next interest will be to see in what significant ways certain parents prevent their children from enjoying wholesome family experience.⁸ We at once perceive that a home may be made unhappy for a child on account of the existence of one or both of two situations: (1) a lack of harmony between the parents themselves, and (2) a lack of accord between parent and child.

IV. Defective Parental Functioning: Parental Conflict

Someone has said that the essential home of the child inheres in the attitudes of his parents toward each other. He is dependent upon them for the two things he needs most in life: security and love. He is dependent upon them for the development of his sense of discipline. If his parents fail each other,

⁸See the writer's more complete treatment of this topic, *Sociology and Social Research*, 13:446-458, May, 1929; 14:135-150, November, 1929.

they fail him. Yet we have to acknowledge the sorry fact that many mothers and fathers do not get on well together. When we scrutinize their lack of harmony, we observe that it consists of one or both of two conditions: (1) an absence of coöperation, and (2) a want of affection. We shall see that the first of these does not necessarily involve the second.

Lack of coöperation. There are fathers and mothers who, for all their fund of mutual affection, cannot, or rather do not, unite upon a scheme of discipline for their family. It is by no means uncommon to find parents who work at cross-purposes in the matter of training their children. What is required of the children by the one parent is nullified by the other. Sometimes the parents flatly oppose each other; sometimes the force of the disciplinary decrees of one parent wanes through the failure of the other parent to lend it moral support. "I sometimes spank her hard," confessed the father of five-year-old Norma Quirk, "but my wife always says, right before her, 'That's not right.' " It is exceedingly strange that parents should fail to see that they are by their lack of team-work undermining their control over the child.

Lack of affection. It is, however, the home that is lacking in love that constitutes the more serious problem. There is little that a home can supply a child to compensate him for the absence of affection between his mother and father. The excerpt which follows clearly shows the devastating effects upon personality of such a home situation.

A father and mother of good social position quarreled constantly. The wife worried over a supposed infidelity of the husband, and on several occasions separated from him. After reconciliation the husband left on business. The wife employed a detective who surprised the man in a hotel room with a girl, and took them to the police station. There was publicity and scandal. Nevertheless, after consulting we with their many friends, both parents decided "to patch those wh for the sake of their children." The home is an armed food, clotif a triumphant wronged woman, and a half-defiant thought and ale, with the children taking sides as the needs and category of f.

B., The Problem Child at Home, Commonwealth Fund, generation, bec. 22.

profit of the situation suggest. There are two, a girl of three, now going into tuberculosis, and a boy of a year who is developing temper tantrums.⁸

From this instance we see how dissension in the home is oppression for the child, against which he reacts as definitely as if a superior physical force were arrayed against him.

How does this happen? In the first place, the child is extremely sensitive to tensions in the home. It does not matter whether the discord between father and mother be overt or covert, the child responds unfailingly to it. In fact, the very young child detects concealed discord even more readily than that which is open, for he is an expert at reading attitudes and muscle tensions, his very inability to interpret other expressions of personality causing him to concentrate upon these. The effect of such parental discord is to build up tensions within the child. Just as constant noise acts upon his nervous system to produce irritation, just so truly does dissonance at home lead to strain.⁹

In the second place, conflict between parents serves as an excellent training course for the child. Nothing conduces to antagonistic attitudes more than to be reared in their midst. A home torn by strife conditions the child in habits of pugnacity, or it causes him to react violently against the whole familial situation. Illness, nervous disorders, and even nervous breakdown may be the child's responses to the hostile forces arrayed against him.

V. Defective Parental Functioning: Parent-Child Conflict

So far we have concerned ourselves with deficiencies in the child's family experience which grow out of the inadequacies of the parents alone. The child suffers in these cases because he is present in the family circle, but he himself is not a party to the trouble. However, we have to observe that children are directly involved in most instances of family difficulty. In the

⁸Van Waters, M., *Youth in Conflict*, New Republic, Inc., New York, 1926, p. 73. By permission of, and arrangement with, the publishers.

⁹Cf. Neumann, F., "The Effects on the Child of an Unstable Home Situation," *Mental Hygiene*, 12:742, 750, October, 1928.

discussion which follows we shall treat of the common ways in which parents and children fail to live harmoniously together.

The nature of parental control. The relationship existing between parents and their children is one of social control. Parents are presumably in command and children are presumably in compliance. If we think of the family arrangement in this way, it helps us to understand these parent-child problems.

We need to note at the outset that no family experience can always run smoothly, on account of this special control-nature of the parent-child relationship. To the parent society delegates the task of bringing the child's impulses into conformity with the prevailing culture. There is no natural direction of the child's impulses into socially approved behavior patterns. The child tends to react to stimuli individually and hence variably; society, however, requires that his expressions be congenial with socially acceptable standards. This opposition of impulse against control constitutes the basis for the earliest, most recurrent conflict in the life of the child. And, since it is the parent upon whom society places the responsibility for thus shaping the child's behavior, the child identifies him as the source of constraint and reacts against him. This identification constitutes the underlying source of parent-child conflict.¹⁰

Faulty parental control. These conflicts that arise out of the reconditioning of the child's impulses in the interests of social harmony are not significant, from a practical point of view. Even the best and most enlightened parents will not escape them. The truly serious conflicts between parents and children are those which arise from *faulty parental control*, or want of proper parental leadership. Failure in this capacity assumes many forms, but we can group them into two large categories, namely, (1) *detachment*, or neglect, and (2) *dominance*, or undue regulation. Our discussion will include, first, representative *cases* of each type, and second, an examination of *causes*.

1. Detachment

When we examine undesirable family situations, we find that not a few of them are such owing to the neglect by mothers

¹⁰For a fuller treatment of this topic, see the writer's discussion, "The Relation of Parental Dominance to Parent-Child Conflict," *Social Forces*, 9:559-563, June, 1931.

and fathers of their parental responsibilities. Many parents fail to give proper heed to the needs of their children. They separate themselves from their children instead of becoming identified with them. They become, not attached to, but detached from, their family.

Cases of parental detachment. Not all cases of detachment disclose the same measure of parental culpability. The examples which follow show degrees of neglect ranging all the way from a partial slighting of the child's needs to complete disregard of them. We have it from one of Huxley's biographers that this great scientist spent his childhood cheerlessly, because his strong intellectual interests were balked by parents who neither helped nor sympathized with them.¹¹ In this case, a vital portion of the child's life was starved for want of its being fed by his parents. In other cases, the amount of contact between parents and their children is even less. In his autobiography, Charles Francis Adams tells of the uncompanionability of his father. The two never played together. In evidence of his father's disinclination to give time to recreation with his family, Adams quotes an entry his father made in his diary one day after he had deigned to take his two sons fishing. Here he takes himself to task for idling away the morning! Charles Francis Adams comments on this entry appropriately when he says what a pity it was that his father did not realize that in playing with his sons that morning he was saving at least one day of his life from utter loss.¹² Extreme as is this separation of a father from his children, there are cases where the gap is even greater. Detachment reaches its height in the case of complete abandonment. Such, for example, was the lot of the celebrated actress, Sarah Bernhardt. Born out of wedlock, she was put into the care of others on a farm in Brittany, while her mother continued her irresponsible life in Paris. Sarah was pathetically neglected. Even after she was removed to Neuilly-sur-Seine, Sarah saw her mother but once in the year that followed, and then quite by accident.¹³

¹¹Clodd, E., *Thomas Henry Huxley*, Dodd, Mead, New York, p. 41.

¹²Charles Francis Adams, *1835-1915*, Houghton Mifflin, Boston, 1918, pp. 11-13.

¹³Woon, B., *The Real Sarah Bernhardt*, Boni & Liveright, New York, 1925, pp. 45-48.

Causes of parental detachment. Why did these parents shirk their full family responsibilities? What caused them to withdraw from the lives of their children? We may recognize two fundamental reasons for such detachment: (1) indifference, and (2) ignorance.

Indifference. There can hardly be any doubt about the fact that many mothers and fathers neglect their children because they do not cherish them. They do not want them, or they do not want them sufficiently. For the fact that he has been born without being desired, the child is made to suffer. Where this is so, we at once recognize some weakness in the character of the parents. In life, a great many children are born, even when mothers have not definitely planned to have them; in fact, even when mothers have planned definitely not to have them. But in most such cases, the arrival of the child causes his mother and father to set aside all other considerations, and so to love him. Those parents who do not feel drawn toward their child are lacking in normal human sensibilities. And, because they do not care for their child, they do not as a rule see to it that he is well cared for. Concerning such parents, we need say nothing further here, save that they ought never to have become mothers and fathers. Only those who love children, and are both physically and temperamentally qualified to become parents, should have offspring.¹⁴

Ignorance. It is hazardous to estimate the proportion of cases of child neglect in which parental indifference obtains. Still, it appears that ignorance as a cause is more common than indifference. After all, most parents do love their children. Yet the number of children who are to some degree neglected is appallingly high. Parents wish to be good parents, but are unaware of the fact that they are not. They are ignorant as to their own shortcomings as mothers and fathers.

Two of the illustrations we have already provided show this unawareness of mothers and fathers concerning their own limitations as parents. Little did Charles Francis Adams' father reckon that his relationship with his boys was not exemplary. He never suspected, so far as may be judged, the negative estimates

¹⁴For elaboration of this standpoint, see Ellis, H., "The Family" in *Whither Mankind*, Edited by C. A. Beard, Longmans, Green, New York, 1928.

of him as a father which his sons held. The pity is the greater because parents do not know what is expected of them. Sometimes their hearts break when they discover their deficiencies too late to make amends. "One of the greatest shocks my father had," discloses a son, "came about four years ago when brother wrote home to him and said, 'The greatest thing I regret in life is that when I was a boy at home, you didn't have any time for me.' This nearly broke up my father. He is a teacher and it hurt him beyond words to think that he had been so busy with other people's boys that he had neglected his own."¹⁵

This tragic testimonial implies that the father was too busy with other affairs to be able to concern himself with his own children. It is to be doubted, however, if mere lack of time can account entirely for the absence of parent-child companionship. Study of available cases tends to show that what matters to the child is the use his father and mother make of the leisure time that is available to them. Few children blame their parents for being so taken up with the struggle for existence that they have little time left for family fun. If parents evince strong regret that they are denied such fellowship, and besides seize every occasion for companionship with their children that does arise, it is quite unlikely that their children will show anything but sympathy for the rigor of their parents' routine. In her delightful autobiography, Mary Antin makes this point clear. She tells how her mother and father, as immigrants in a new land, worked slavishly for a bare livelihood. Their store was open from early morning until late at night. Yet her father found time in which to associate with his three children. He took them walking and driving, answered their innumerable questions, and taught them special tricks of speech and conduct, which he "imported" from various parts of the country.¹⁶ For all the pressure of a hard life, this father did not forsake his family; and he found rich reward for his endeavors in the loving tenderness which his children felt for him.

¹⁵Bogardus, E. S., *Boys' Work Survey* (Sponsored by the Rotary Club of Los Angeles), Univ. of Southern California Press, 1926, p. 74.

¹⁶Antin, M., *The Promised Land*, Houghton Mifflin, Boston, 1917, pp. 270, 271.

2. Parental Dominance

If one practice disastrous to the child is too little parental concern over his welfare, another is too much parental control. We have seen how the parent's rôle is that of a leader. As a parent, he has power over his child; and, as is true in all leadership, his opportunities for the misuse of power are legion. In the discussion that follows, we shall see in what principal ways parents may unduly regulate the lives of their children.

Cases of parental dominance. There are degrees of parental control as there are of parental neglect. In some cases we find parents who seek to establish dominion over some special portion of the child's life; in other instances, mothers and fathers attempt to set up a dictatorship over the child's entire experience. Parental dominance thus ranges all the way from the partial to the complete. Let us look at a single instance of the attempt of a father to impose his will upon his son in one vital way. The case is that of Harry Scranton, 13, who came to the attention of the social worker when school authorities reported his continuous absence from class. The following is from the record of the social agency:¹⁷

When the notice of the disappearance of Harry Scranton was received, the worker called on the mother and was cordially received. She was frank in her discussion of her son and talked at great length about him. Harry was very much interested in electrical apparatus and working with electric wires, and for the past two years had been doing odd jobs for a nearby electrical shop. A week after the school session opened, Harry disappeared, and eleven days later a wire from his grandmother in Iowa announced his safe arrival. He had got train and automobile rides all the way east.

During two visits to the mother, it was learned that Mr. Scranton was a Presbyterian minister, but not in the ministry at the present time. He was engaged in the automobile business as a salesman. The mother intimated that he did not understand Harry very well and did not approve of the interest in electrical things.

¹⁷*The Scranton Interview* (an unpublished document in possession of Professor Erle F. Young, Univ. of Southern California).

(Following is a portion of Mr. Seranton's explanation, given to the social worker, of his son's difficulty.)

"Vocational rot! It is your educational system that has ruined the delicate mind of my boy. How do you dare to throw a thirteen year old boy on his own resources and let him pick out his own courses? Bunk, all bunk. I blame them with their fool workshops and millions in electrical equipment for my boy's present condition. I want my boy to be a gentleman and a scholar. I hate a hod carrier. I know an electrical engineer isn't a hod carrier, but I won't have my boy be an electrical engineer or any other kind."

Mr. S. then drifted into mention of his own school days. Immediately he grew eloquent and enthusiastic. He spoke at length about the beauty of the Greek language, then swift as lightning the whole atmosphere changed again and pounding on the arm of his chair, Mr. S. shouted: "That is the kind of training my son must have, and that is the kind of training my son will have!"

To the end, Mr. Seranton remained firm in his resolve personally to determine as well as to supervise his son's education.

This tendency of parents to dictate the specific policies their children are to follow in special fields of endeavor is perhaps the commonest form of dominance we find. Most often it is a certain occupational activity which the parent wants his child to pursue, in spite of clear evidence his child harbors no interest for that line of work. Every college teacher can name scores of students he knows who are following parental desire in this way, and with unhappy results that can only too well be imagined. Other interests are foisted upon the child by inflexible parents in the same way: for example, a special kind of musical training, a certain kind of social life, strict performance of particular religious rites, and even marriage with a mate not of his own choosing.

In such cases as these, the parent holds a particular conviction on some point of conduct which he wishes to impress upon his child. He may even allow his child to exercise his own judgment on every issue but this one in particular. Parental dominion, in these cases, is thus partial. But there is nothing to prevent a parent from imposing his or her entire will upon

the defenseless child. Let us see how this occurred in the case of Peter B.

The officials of the progressive school were at a loss to understand Peter's behavior. He had been entered at the school only two weeks before by his mother, when he was seven and one-half years old. It was plain the family was well-to-do, for Peter and his mother arrived at the school each morning in an expensive automobile, driven by a chauffeur. When they appeared the first day, the director of the school was pleased to note the unusually good manners of the boy, and the refinement of the mother. When being introduced to someone, Peter would make an especially gracious bow, and say exactly the right thing. But, no sooner had arrangements for his admission been completed and his mother departed, than a new Peter came to light. Whenever he could do so without being seen by a teacher, he took great delight in making life miserable for the other children. It was his favorite trick to steal up behind a child, then hit him over the head with one of the wooden blocks used by the children for building. He pinched, scratched, and even bit his peers. But towards the teacher his conduct was perfect. Finally Peter was discovered after he had waylaid the school cat and as he was about to drive a nail into its tail.

The writer was asked to study the case. He arranged for an interview with the mother at her home. She professed to be as baffled by Peter's conduct at the school as were his teachers. She said Peter was a model child at home, and gave it as her view that the school must be responsible for the new twists in her son's behavior. She seemed to resent specific questions about her relations with her boy, but definite queries brought out amazing facts. She still gave Peter his daily bath. She still dressed him. She was present when he had his meals, and saw to it that he ate properly. So far as the investigator could discover, Peter had no play-mates; she thought the influence of the other children in the community would be corrupting. Later, interviews were held with certain neighbors who had often been in Peter's home. Their reports were likewise revealing. They told of Peter walking up and down the main staircase of the house, under the supervision of his mother, who sought to

teach him unusual grace and bearing in making the ascent and descent. Said one neighbor: "She's determined to have him 'walk like a king.'"

When the facts were uncovered, Peter's conduct became intelligible. His father, a prosperous broker, gave little time to his wife and none at all to Peter. It was clear that Peter's father and mother did not cherish each other. Peter was an only child. Frustrated in her marriage, Mrs. B. clung to her son. She was a woman with great personal charm, but with little schooling and almost no intellectual interests. Unless she were attending to Peter, she would be idle. The study showed, too, that before Peter was born she had read an article on the tendency of the rich to entrust the care of their children to outsiders. She had resolved not to sin in this way. So she had from the start assumed personal responsibility for Peter's complete care. We have already seen with what results. Poor Peter had no life of his own. His active spirit was weighed down at every point by the domineering program sponsored by his mother. Above everything else, his nature hungered for freedom. His chance came at the private school. For the first time in his life, he was out from under his mother's direction. For the first time he had association with other children of his own age. The lid of restraint blew off, and Peter's self-assertive nature ran riot.

Causes of parental dominance. Why do certain parents exhibit such strong desire to regulate the lives of their children? We shall note three fundamental causes: (1) temperament and training, (2) compensation for inferiority, and (3) undue identification.

Temperament and training. In seeking the foundations of extreme parental control, we first turn to the personality itself. We all recognize there are persons who are by nature aggressive. They are born to lead, not to be led. Unless they are conscious of their own ascendent natures, and consciously direct themselves, they are likely to crush their children's spirits. Perhaps here we have explanation of the fact that few children of great leaders also become great. In addition to natural temperament, training of a certain type conduces to dictatorial personality. A whole civilization, through the emphasis it places on certain values, can make for parents who are rulers. We see

this clearly in the case of Oriental culture, which stresses the command of the head of the household and the subservience of the rest of the members. The writer recalls the fate of one of his students, a Japanese gentleman, who himself had a wife and two children. He had come to the United States to study. During one term he received a cablegram from his father ordering him home. No reasons for the order were given. It would have been offensive for him to have asked his father for an explanation. He simply packed his baggage and departed. His was not to reason why, his was but to do . . . or be disinherited.¹⁸

Compensation for inferiority. There is no human experience that so lends itself to abuse as parenthood. Should life deny to a parent normal satisfaction for his self-assertive tendencies, it is the easiest thing in the world for him to satisfy his craving for power by lording it over his child. Thus a father can be "the boss" at home if an underling in the world outside. Again, there are mothers and fathers who, having themselves failed to attain some goal, in turn set up this objective for their children. Such parents, for example, may sacrifice pitifully their own comfort so that a son or daughter may go to college. From one point of view, they are making a sacrifice, but from another standpoint, they are attempting to satisfy their own egos vicariously.¹⁹ In other ways as well, mothers and fathers look to their sons and daughters to fill the gaps in their own experience. In his autobiography Rousseau tells how inconsolable his father was after the death of his mother. "When he said to me, 'Jean-Jacques, let us talk of your mother,' my usual reply was, 'Yes, father, but then you know we shall cry,' and immediately the tears started from his eyes. 'Ah!' exclaimed he, with agitation, 'give me back my wife; at least console me for her loss; fill up . . . the void she has left in my soul.' " Under such circumstances, the needs of the parent are permitted to outweigh in importance the needs of the child.

¹⁸For a thorough analysis of the "patriarchal pattern" of parenthood, see Burgess, E. W., "The Family as a Unity of Interacting Personalities," *The Family*, 7:3, March, 1926.

¹⁹Cf. Young, K., "The Projection of Parental Ambition," *The Family*, 8:67, May, 1927.

Undue identification. There is a kind of undesirable parental control which arises not so much from inferiorities in the lives of parents as from a combination of excessive and unintelligent affection. Some parents are bad for their children because they love them too much, and unwisely. We see this conspicuously in many *only child* situations. The writer will always remember a scene illustrative of this point. He was standing by the office door of a nursery school when he beheld coming toward him a middle-aged couple and a very little boy. The little boy proved to be two years old. As he toddled forward, he had a parent on either side of him, holding his hand as if each never meant to let go of it. They had come to enter him in the nursery school, a decision which must have required great courage of them, for they found it very difficult to leave him, after he had been registered. He was their only child and they had waited a long time for him. When they were told for the fiftieth time that they must go, they started away, only to have the little fellow shriek to heaven for their return. In no uncertain measure, these parents were establishing a psychological hold upon their son which, if not relaxed, would keep him from achieving an independent personality. As Groves has pointed out, the only child and the sickly child stand in special danger of undue parental solicitude as to their welfare.²⁰

VI. Desirable Parental Functioning

Having pictured faulty family life, we may now depict that which is wholesome and good. But we will not find such a wealth of material with which to illustrate desirable parental functioning as is to be had on the negative side. The records of courts and clinics, to which we ordinarily go for our illustrative material, avail us nothing here, except by indirection. This is perhaps the chief value of studying the negative side of the family problem, that it makes clear to us, by contrast, the nature of the positive side. But for actual instances of healthy parent-child experience we must go to biography and autobiography and to life itself.

²⁰Groves, E. R., *Personality and Social Adjustment*, Longmans, Green, New York, 1931, p. 189.

Elements. What shall we say is the test of an adequate family experience? How shall we judge if a child has had a happy, wholesome relation with his mother and father? A test will be whether or not a significant quota of those experiences of life which the child looks upon as satisfying have been enjoyed *at home and through home*. When the child whose home life was happy thinks back upon his childhood at home, pleasant memories crowd his mind. When the child whose home life was unhappy thinks back to his first happy experiences, he finds them transpiring outside his family circle. Writing of Czarist Russia, Kropotkin gives it as his opinion that few men or women of moment derived their first impulses toward a higher development from their parents.²¹ If the reader will run through in his mind the biographies and autobiographies he has read, he will find that most of them provide ammunition in defense of Kropotkin's view, that more frequently than not the first stirring stimulations to self-realization come to children from sources outside the family circle, notably from friends and teachers. In biography after biography hardly any reference at all is made to the persons' early home experience; in autobiography after autobiography we find no acknowledgment of parents as the prime movers in the lives of the writers. If the home experience has been constructively vital in the life of a child, he will always trace his best developments back to this source, for no experiences antedate in time those which a child has with his parents.

Our discussion to this point puts us in position to itemize the elements of an adequate parent-child relationship. We may state our conception thus: every child is entitled to two parents (1) who love each other, (2) who love him, (3) who understand his capacities, interests, and aspirations, and (4) who help him to realize them, and thus help him to realize himself.

Examples. Happily, homes do exist in no small numbers where parents and children enjoy superb and profitable fellowship. In bringing this discussion of the child and his family experience to a close, it will be appropriate for us to glimpse something of the nature of such homes. These views will be

²¹Kropotkin, P., *Memoirs of a Revolutionist*, Houghton Mifflin, Boston, 1899, p. 88.

merely suggestive of what is good in each situation. The student will discover for himself in each picture presented more meaning than the writer's brief comments on it can disclose. Each example is designated according to the principal value for the child which it embodies.

Evoking enthusiasm. Good parents are those who engender a flare for something worth while in their children. This they accomplish, not so much by conscious design as by the force of their own enthusiasms. They bubble over with eagerness for beauty, or literature, or human fellowship, and the child in their presence gets caught in the flood of their fervor. As Dr. Richard C. Cabot tells, concerning his own experience:

As I remember my own childhood, I think nothing helped so much as what I saw call out the unfeigned and spontaneous enthusiasm of my elders. When they glowed, crackled or exploded with delight over a book read aloud, over someone's bravery, over a fern, after a piece of music, over a promise maintained in difficulties, and were not aware of my presence or trying to set me an example, then I inwardly and almost unconsciously marked and was marked by the action of reality.²²

That last clause tells the tale: a child may be stirred and his destiny established by the things over which his parents show enthusiasm.

Encouraging effort. Once the flame of interest has been kindled within the child, good parents are those who help to keep it going. It is easy for a child's interest along any line to wane, unless someone stands by to lend encouragement. Many adults can testify, as does the writer of the following excerpt, to the value of this kind of support.

In those days there were few opportunities for learning painting, but my mother always encouraged my taste for art, and as soon as we went to New York she put me to work with Mr. Coe, who was about the best teacher then to be found. . . . My mother always provided me with the best colors and drawing materials, and when I began copying, she would have my feeble efforts framed, much to my

²²Cabot, R., *What Men Live By*, Houghton Mifflin, Boston, 1914. By permission of, and arrangement with, the publishers.

delight; although they were poor daubs, I was proud to see them hanging up and was encouraged to persevere.²³

Here is told the way to provide the child with incentive to continue through the trying practice-period of his interest.

Widening circle of interests. Good parents are those who seek to provide their children with ever-enlarging social horizons. John Gladstone was in the habit of bringing the British Empire into his home; he never lost an opportunity to discuss the affairs of the Dominion with his children, and their views were of moment to him. When leaders in every walk of life visited in Gladstone's home, his children were both seen and heard by them.²⁴ The value to children of these enlarging contacts is inestimable. No one who reads the life story of James Gibbons Huneker, as he himself tells it, can fail to discover by what means he was able to amass his prodigious store of knowledge. Huneker turned out to be one of the few great critics of all the seven arts whom the world has known. He himself tells us he got his bearings at home. Famous men in every sphere of art made the Huneker home their clearing-house, due to the charm, talent, and sociability of James' father. The long list of imposing names includes Edgar A. Poe, Edwin Booth, Pierce Butler, William Burton, John Sartain, Thalberg, Louis Gottschalk, Vieuxtemps, and Ole Bull. With all of these eminent men the little boy James became intimately acquainted, because he was invited by his father to join the company and to participate in the fellowship. By this practice the boy's mind was stretched to include all the realms of artistic endeavor. He knew there were lives and lights outside his home.²⁵

Working and playing together. Good parents are those who share the experiences of their children. They enter into the lives of their sons and daughters by entering into their interests. Edward Bok relates his early difficulties in adjusting to American ways; how, in spite of the contribution of the schools, it re-

²³Armstrong, D. M., *Day Before Yesterday*, Scribner's, New York, 1920, pp. 43-44. By permission of, and arrangement with, the publishers.

²⁴Morley, J., *Life of William Ewart Gladstone*, Macmillan, New York, p. 19.

²⁵*Steeplejack*, Scribner's, New York, 1922, Vol. I, pp. 35-51.

mained for his father to see him through victoriously. Night after night the two worked side by side over the young boy's lessons.²⁶ In the same spirit, Pasteur's father labored to keep apace of his gifted son. Even after Louis had gone off to the academy for advanced study, his father would return home after a day's hard work at manual labor, only to sit up late into the night studying the chemistry books, so he could talk intelligently with his son on the subject of the latter's chief interest.²⁷ One instance more, and this perhaps the most notable case that can be found in literature of the intellectual identification of father and son, namely, that of James Mill and his son, John Stuart Mill. From the time John first began to toddle, his father was his chief teacher. James Mill's study became John's classroom. Never was the father too busy to concern himself with his son's affairs. During all the time the elder Mill was writing his history of England, the younger Mill was in his father's study, subjecting the work to countless interruptions.²⁸ No truer test of a father's interest in his child's work can be supplied than this: that he welcomes him into his own study, and lays down his own work for his child's.

Work and play often blend so completely that it is impossible to distinguish the one from the other. The parent who works with his child is also playing with him, if both enjoy the activity. But there is sheer recreational activity which the two may enjoy together. Nothing surpasses play as a binding force. Will Durant perceives this. In the course of a "confession" of the way in which he tries to bring up his daughter, Ethel, he mentions their recreation together, referring especially to swimming. Then he tells us that soon Ethel will be learning to skate, and he adds significantly, that when she does, he too will take his falls with her.²⁹

Cultivating self-reliance. Good parents are those who equip

²⁶Bok, E., *The Americanization of Edward Bok*, Scribner's, New York, 1923, p. 439.

²⁷Vallery-Radot, R., *Life of Pasteur*, Doubleday, Doran, Garden City, 1923.

²⁸Cf. *The Autobiography of John Stuart Mill*, Columbia Univ. Press, New York, 1924, p. 54.

²⁹Durant, W., "How a Great Scholar Brings Up His Child," *American Magazine*, 107:40, March, 1929.

their children with resources for independent living. Though we consider it last, this matter is of first moment. The good parent helps his child to help himself. As Havoclock Ellis has put it: at birth the umbilical cord is cut, giving the child a separate physical existence; he needs a separate spiritual and social existence as well; it is therefore necessary that he be so prepared that another day he may be able to sever "the silver cord" of dependence upon his family.³⁰

To achieve this result, the child must be trained from the outset for a life of self-determination. He must learn to do such things for himself as are appropriate to his age. Early he must learn to make his own decisions and solve his own problems. The good parent helps by seeing to it that the child is encouraged to do this. His father and mother counsel with him, but he must himself conclude his actions. We have an admirable example of good parenthood in this respect revealed to us by Lyman Abbott in his autobiography. In discussing a momentous change of career, he writes:

Whether my father had approved my change from the law to the ministry I do not know; I doubt whether I ever knew. Certainly if he had been in this country when I was debating with myself the question I should have sought his counsel; as certainly he would have declined to exert any pressure in favor of, or against, the change. He would have said to me, "This is a question which only you can decide." He then would have put before me with great clearness, but also with absolutely judicial fairness, the advantages and disadvantages of the change, and would have left me to balance them and come to my own conclusion. But when that conclusion was once reached he proceeded to give me every help in his power to carry my plan to a successful issue.³¹

In summary, may we say, briefly, that good parents are those who give to the world children who are happy as they look back to their homes, and eager and adequate as they look forward to the assumption of their own responsibilities. The

³⁰"Children and Parents," *Golden Book*, 7:323, March, 1928.

³¹*Reminiscences*, Houghton Mifflin, Boston, 1923, p. 136. By permission of, and arrangement with, the publishers.

social test of the success of any home is found in the ability of its members to live useful, happy lives of their own.

READINGS

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(What concrete material does the writer offer in support of her main contention? Do you think she makes her case? Why?)
2. Brown, L. G., "The Development of Diverse Patterns of Behavior Among Children in the Same Family," *Family*, 9:35, April, 1928.
(How much of Mary's personality was determined because Nellie was her sister? How much the other way round? What must the second-born child in any family do to secure independent status?)
3. Brownell, H., "Teaching Children to Appreciate Home," *National Education Association Journal*, 18:299, December, 1929.
(What method should be followed in the endeavor to cultivate an appreciation of home life in children? Why?)
4. Burgess, E. W., "Family Tradition and Personality Development," *National Conference Social Work*, 1928, p. 322.
(What are the family "patterns" of the Radcliffe family? How does the writer use this family to illustrate his main point?)
5. Caldwell, M. G., "Home Conditions of Institutional Delinquent Boys in Wisconsin," *Social Forces*, 8:390, March, 1930.
(What type of home situation was most prevalent in this study? Do you think home conditions are important here? Why?)
6. Ellis, H., "Children and Parents," *Golden Book*, 7:318, March, 1928.
(What historic attitudes of parents toward children does this writer portray? Which one do you favor? Why?)
7. "Environmental Conflicts in the Family and Social Life of the Modern Child," *National Conference Social Work*, 1927, p. 281.
(List these conflicts. Are any of them inevitable? Why?)

8. Glueck, B., "Significance of Parental Attitudes for the Destiny of the Individual," *Mental Hygiene*, 12:722, October, 1928.
(What case-material made the deepest impression upon you? Why? Out of what experience does the author write? Is he convincing?)
9. Neumann, F., "The Effects on the Child of an Unstable Home Situation," *National Conference Social Work*, 1928, p. 346.
(What kind of broken home most deprives the child of a sense of social security? Why? What would it be best to do in these cases?)
10. Ogburn, W. F., "Changing Family with Regard to the Child," *Annals American Academy*, 151:20, September, 1930.
(How has the family changed in the last fifty years? How has this affected the child? What further changes do you anticipate?)
11. "Parents as Children See Them," *Harper's Monthly*, 164:103, December, 1931.
(What are three outstanding opinions about adults which children hold? Are these judgments correct? Why?)
12. Plant, J. S., "Child as a Member of the Family," *Annals American Academy*, 160:66, March, 1932.
(What are the "mental hygiene aspects" of the child's position?)
13. Reuter, E. B., and Runner, J. R., *The Family*, McGraw-Hill, 1931.
(Chap. 12: "The Interaction of Parent and Child," p. 336—In what ways do children educate their parents? Which of the extracts presented do you like best? Why?)
14. Richardson, F. H., *Parenthood and the Newer Psychology*, Putnam, 1926.
(Read any one chapter. What new light does it throw on the question of which it treats? What is "the newer psychology"?)
15. Russell, B., "Are Parents Bad for Children?" *Parents' Magazine*, 5:18, May, 1930.
(What sort of parent that passes for good is actually bad for children? Do you think the writer objects to all parents? Why?)

16. Sayles, M. B., *The Problem Child at Home*, Commonwealth Fund, Division of Publications, 1928.

(Read any two chapters. What problems are considered? In what respects, if any, are the writer's analyses not adequate? Why?)

17. Sherbon, F. B., "Contribution of the Home to the Preparation of the Child for Life," *Journal of Home Economics*, 19:78, February, 1927.

(List the items in the home's contribution. Can you add any others?)

18. Van Waters, M., *Parents on Probation*, New Republic, 1927.

(Chap. 4: "Nineteen Ways of Being a Bad Parent," p. 57—Which of these ways strikes you as being the worst? Why?)

19. Weill, B., *Behavior of Young Children of the Same Family*, Harvard University Press, 1928.

(Defend or criticize: ". . . it seems that it may well be claimed that no two people, adult or child, have the same environment." Does the writer think environment or heredity to be the chief cause of behavior problems in children? Why?)

20. Young, K., "Parent-Child Relationship: Projection of Ambition," *Family*, 8:67, May, 1927.

(What is the meaning of "projection"? Why do parents resort to it?)

CHAPTER IX

THE CHILD AND PLAY

"Joy is as holy as pain."

—ROMAIN ROLLAND

I. Introduction

The discussion which we are to follow on the topic of the child and his play extends to five phases of this subject. We shall begin with an inspection of the nature of play experience. We shall, second, estimate its value for the child. Having determined the significance of play experience, we shall next see what forms it assumes in the course of the child's maturation. That is, we shall note, third, the various stages in the child's play development. But the child does not play empty-handed. He requires play-equipment. Consequently, we must consider, fourth, the character of appropriate play-facilities. Fifth and last, we need to consider how the child's play experience may contribute most to his welfare. We shall therefore examine certain principles of constructive play.

II. The Nature of Play

Universality of play. It is doubtful that any activity can be found among animals and human beings which is more common than play. Animals of all species play, as do also members of all races of mankind. As we watch a kitten or puppy at frolic, do we perceive much that differs from the playfulness of the human babe? We have here a uniformity of behavior that is astounding. But even more amazing is the fact that the young of all the human races play essentially alike. We find this to be

the case whether we compare children of existing races with those of the past or with one another.

Thus the Roman children engaged themselves at play much as our children do today. Their dolls were made of wax or clay and many of them had jointed arms and legs, closely approximating those which are in style today. Wagons and carts likewise prevailed, as we may judge from Horace's references to children hitching mice to toys of this kind. We also have pictures of children spinning tops and rolling hoops, and of little boys walking on stilts. Few formal descriptions are to be had of the games of the Roman children, but from material available we find they engaged in games corresponding to our own "Blindman's Buff," "Hide and Seek," "Jackstones," and various games of ball. In playing "Jackstones" the children employed knuckle-bones of sheep and goats and occasionally imitations of these in ivory, bronze, and stone. Pebbles and nuts served the children for a game resembling marbles.¹ So, if we turn our eyes back to times that are past, we find children amusing themselves in ways that look familiar.

So, too, if we let our gaze wander over the face of the earth, catching sight of the way children play at the present time among races differing widely as to civilization, we find amazing uniformity in their play experience.² Although its guise will differ from place to place, the doll will always be found present. Always, too, there will be something that serves childhood as a *ball*. Play is everywhere to be found, and in its essentials it is everywhere the same.

Spontaneity of play. What induces play? Play is everywhere to be found among the children of men because it is native to organic life itself. It needs no stimulation from the outside. It is unforced. It is a sort of bubbling over of an inner fountain. The kitten needs no invitation to chase after its tail, nor does the infant child need to be urged after his toes. Both play because it is in the nature of their lives to do so. No child

¹Cf. Johnston, H. W. and M., *Private Life of the Romans*, Scott, Foresman, Chicago, 1932 (revised edition), Sections 102-103.

²For a comprehensive review of various studies on the play-life of children of different races, see Marshall, H., "Children's Plays, Games, and Amusements," in *Handbook of Child Psychology*, Edited by Carl Murchison, Clark Univ. Press, Worcester, 1931, p. 516.

has to be prodded to play, unless he has first learned not to play, or is unwell.

Pleasurefulness of play. When the demand of the child's body for activity has been heeded, organic satisfaction results. It is fun to play. It is on this account that children need no urging in this direction. When not resting, or satisfying some urgent physiological need, a child naturally turns to play. Because play is pleasurable, the child engages in it for its own sake. What further reason need he have for playing except it is fun? He does not look for benefits to accrue from it. He can lose himself in the activity. Play is for him an end in itself.

Now we have got at the meaning, at the heart of play: it is an emotionally satisfying activity pursued for its own sake. We see this if we contrast *play* with *work*. In the case of work, an inducement for activity is present. A person works because he is rewarded in some way for his effort. Work is thus a means to an end, and is performed with a certain degree of awareness of the end desired. On the contrary, in play a person loses himself. He plays simply because he wants to play. In play, then, the important thing is the *attitude* towards the activity, and not the activity itself. Any pursuit may be playful, provided it be followed without ulterior purpose. And, on the contrary, any activity which is normally a play-activity can be converted into work through indulgence in it for some reason other than pleasure.

III. The Significance of Play

Negative views. Of what use is play? What does it achieve for the child? To this line of questioning, three distinct negative replies are forthcoming from those who attach little or no positive value to play.

1. *Play as unmixed evil.* This conception takes its root in the religious doctrine of "original sin," that is, that all children are born wicked and base. Play is regarded as the instrument by which the devil tempts children to go his way. Play and idleness are in this view synonymous and are thought inevitably to lead to mischief. This is of course the Puritan religious philosophy which prevailed in early Colonial days.

So rigorous was the ban upon play for children that the student who today reads the writings of certain leaders of that period can scarcely believe them to be the utterances of sane minds. Professor Groves does not exaggerate when he refers to "the morbid teachings of New England theology. . . ."³

Not always has this condemnation of play for children been attached to a religious philosophy, nor has it been entirely confined to one historical period. The idea that amusement of any sort is bad for the child, that it is yielding to base influences, has been current at all times. Thus the great Thomas Carlyle writes of himself, "I was forbid much, wishes in any measure bold I had to renounce; everywhere a strait bond of obedience inflexibly held me down. It was not a joyful life, and one devoid of all play."⁴ Fortunately for our time, this sort of confession cannot often be made. We have got far away from the idea that play is idleness. But even today there are fathers and mothers who look upon play as unmixed evil, the road to eternal damnation.

2. *Play as lesser evil.* There are adults who can make out no good case for a child's playing, but who permit him to play in order to prevent something worse. This something worse is having the child about, interfering with their own activities. So, for example, the mother who has special work to do urges her child to "go out and play." She may not mean that at all. She may mean "Get out of my way." Indeed her child may have been playing at the time, and her command may mean to him, "Stop your play and go outdoors." In this same class we may place the mother who supplies the rattle to stop her child's crying. It is not that she likes to see him play, but that she dislikes more to see him cry. Parents often look upon play in this way, as abatement of nuisance.

3. *Play as temporary indulgence.* Some adults go so far as to accord play a degree of merit, but they add that play is child's activity. It is appropriate to the early years of life, but not to those of maturity. In fact, in their view it can be sanctioned only a fraction of the time even in childhood. For they

³Groves, E. R., *Social Problems of the Family*, Lippincott, Philadelphia, 1927, p. 37.

⁴See Carlyle, T., *Reminiscences* (Edited by James Anthony Froude), Scribner's, New York, 1881, Part I: "James Carlyle."

look upon play as relaxation, and believe that the more serious preparations for life must not be ignored. They make a clean distinction between play and the serious responsibilities, such as school work, music lessons, and housework. They see no educational value in play and accordingly hold that it deserves only a fractional emphasis in childhood, and a decreasing place in the life of the person as he grows into adulthood, with its increasing burden of responsibilities.

Positive views. These three views on play move progressively from hostility to tolerance. On the other side we have a series of positions which definitely affirm the goodness of play, four of which we shall examine.

1. *Play as a safety-valve.* Of the many attempts to account for play among children, those of Schiller and Spencer have taken the attention of students of childhood.⁵ Briefly, the Schiller-Spencer theory holds that the child plays to give vent to pent-up physical and nervous energy. As natural tensions accumulate, they gain force and finally break out in the explosive form of play. Play thus serves to preserve organic balance. Lately, this theory has suffered much criticism. It has been pointed out that children play when they are not particularly charged with energy, and they often play long after they are exhausted. However valid these criticisms may be, they do not entirely discredit the Schiller-Spencer theory. Certainly among adults we see how often play is the saving factor in their lives. By throwing themselves into play they unloosen the rigorous nerve-tangle into which a day's strenuous work has brought them.

2. *Play as drive to activity.* If the child does not need to wait until a fund of energy wells up within him before he plays, what does lead him to express himself in this way? Many psychologists believe that play is the natural form of behavior for the child. He is born to play. Play is an instinct, and the child can no more restrain the impulse to play than the impulse to eat. The value of play, then, is that it keeps the child active, through making activity pleasurable.⁶

⁵Schiller, F., *Essays, Aesthetic and Philosophical*, Bell, London, 1875; Spencer, H., *The Principles of Psychology*, Appleton, New York, 1873.

⁶For an exposition of this viewpoint, see Blanchard, P., *The Child and Society*, Longmans, Green, New York, 1928, p. 138.

3. *Play as preparation.* According to still other students, play not only keeps the child active but it provides activity that is purposive. Play prepares the child for the serious business of living. Through play the child acquires skills that are requisite to survival. Through play the child develops strengths which are to serve him in the later struggles for existence. We see this development clearly in the case of the young animal—the kitten, for example, which in play pounces upon a bit of crumpled paper or sinks its claws into the crevices of its basket. These movements help to build up efficient skills. In the same way, children who play at keeping house or store are learning in some measure to equip themselves for the actual responsibilities of a later day.

4. *Play as experimentation.* Finally we come upon a group of students who, while granting the purposive character of play, deny that the realization of its benefits are necessarily deferred to a future time. Play is not so much preparation for later experience, they hold, as it is learning through present experience. Education starts at birth, and it starts by *doing*. Through his play the child becomes acquainted with his universe and with himself. His play is thus a kind of experimentation with reality.⁷ Far from being unmixed evil, play is an unmixed boon. The child's development depends upon his play. Out of this spontaneous, happy activity are derived his physical, mental, emotional, and social adjustments. In play he lives, and through play he learns how to live better. Here we have a vital conception of development through play. It is small wonder that the attitude of modern science towards the child's play has swung extremely away from the Puritan view to the belief that play is "the serious business of childhood."

Unwholesome play and social disorganization. There is close correspondence between the moral level of a society and the kind of play-life which that society provides for its children. A community which does not supply wholesome recreation for its young citizens is building up for itself a nest of juvenile delinquents. As Jane Addams observes: "To fail to provide for the recreation of youth is not only to deprive all of them of their

⁷Cf. Johnson, H., *Children in the Nursery School*, John Day, New York, 1928, Part II, part 1. See especially the "Introduction," by F. W. Ellis.

natural form of expression, but is certain to subject some of them to the overwhelming temptation of illicit and soul-destroying pleasures."⁸ Jane Addams speaks out of a wealth of experience with underprivileged boys and girls in Chicago. And various studies recently completed in that city confirm her judgment. Clifford Shaw and his associates⁹ sought to discover the relationship existing between rates of delinquency and the several natural areas of the city. To this end, they marked off the city into square-mile units, and attached to each unit the number of cases of delinquency which sprang from it. They found that (1) the delinquency rate varies greatly for different parts of the city, there being certain neighborhoods which are almost free from errant boys and (2) the rate varies inversely in proportion to the distance of the area from the center of the city. Plainly most delinquents come out of the area around the "Loop," the business and industrial centers which include the stock yards and the steel mills. These are the regions of greatest physical deterioration. These are the areas where wholesome play opportunities are least available.

Other studies support the view that children's characters are closely tied up with their play experience. Can it be just a coincidence that in each of about 5,400 out of 6,000 cases of stealing to come in a given year before the Juvenile Court of Cook County two or more boys were jointly involved?¹⁰ Supplementary evidence leads us to believe that the influence of ill-minded companions is a significant factor in juvenile delinquency. Healy and Bronner, examining 3,000 anti-social careers, conclude that bad companionship operated as a primary influence in 62 per cent of the cases.¹¹ The familiar proverb holds: "Birds of a feather flock together." But not all the cases represent the coming together and reinforcement of two bad characters. Oftentimes the influence toward evil comes entirely from one child, with the other child falling under its spell. In any case, the child's companions are seen to be vital determinants of his destiny. Next to his family experience nothing

⁸*The Spirit of Youth and the City Streets*, Macmillan, New York, 1909, p. 103.

⁹*Delinquency Areas*, Univ. of Chicago Press, Chicago, 1929.

¹⁰*Ibid.*, pp. 7-8.

¹¹*Criminals and Delinquents*, Macmillan, New York, 1926, p. 179.

counts for so much in the development of the child's personality as his play experience.

IV. Play Development

Stages. We know that the play interests of children change as they grow up. What engages their attention when they are young? What when they are older? Let us take note of the steps up the ladder of play. For the sake of simplicity we shall in our discussion pause upon three rungs in the ascent: (1) the period of infancy, (2) the period of early childhood, and (3) the period of later childhood.¹²

1. *Infancy.* We may characterize this initial play-phase in the life of the child as being (1) sensori-motor, (2) experimental, and (3) unregulated and individualistic.

When we say that the infant's play is almost completely sensori-motor in nature, we mean that his body and his senses are the nuclei of his activity. His own body is one of his chief toys. When he is very young, he plays with himself, with his fingers and toes. He moves about a good deal. He makes sounds to his own satisfaction.

His play is also experimental. He uses his sensori-motor play to test out himself and his immediate environment. He is forever learning through exploration. At six months of age he performs a variety of playful actions: he reaches, grasps, bangs, crumples, and splashes. He plays with a rattle. He is learning to use his hands in many ways. At nine months he will make rhythmic movements to music and play "Peek-a-Boo." At twelve months, if set an example, he will scribble with a crayon. Now he can wave "bye-bye." Now he will play with his image reflected by the mirror. At eighteen months he will scribble without invitation or urging, and build with his blocks. At two years he will play catch and toss, ride his Kiddy-Kar, and play in his sand pile. In an ever increasing number of ways, he uses his muscles and senses to experiment with the world about him.

¹²For other classifications, see King, I., *The Psychology of Play Development*, Univ. of Chicago Press, Chicago, 1920; Lehman, H. C., and Witty, P. A., *The Psychology of Play Activities*, Barnes, New York, 1927; Blanchard, P., *The Child and Society*, Longmans, Green, New York, 1928.

It is now easy to see what we mean when we say that the infant's play is unregulated and individualistic. He does not play by rules. His fun does not have to follow definite patterns. He engages in no regular group games. Much of his play is solitary, and even that which he shares with other children is not truly social. It is not so much that he plays with other children as it is that his play transpires in their presence.

2. *Early childhood.* When we come to the second stage of the child's play development, we find it noteworthy on three accounts: (1) marked sensori-motor improvement, (2) adherence to rigid rules, and (3) the beginnings of group play.

Sensori-motor accomplishment continues throughout the child's development. Progress at this point consists in the perfecting of established abilities, as well as in the addition of new lines of expression. At four years of age the child can walk, run, jump, and climb. He can bounce and toss a ball, although he cannot catch it. And here is what the five-year-old boy can do.¹³ He has gone beyond mere locomotive skill and developed a sense of balance. He can hop, skip, walk without faltering on the curbstone, and he can jump down steps. He likes to do all of these things for fun. He can turn a somersault. He finds swimming delightful. His favorite games are "Ring around the Rosy" and "Farmer in the Dell." At the age of six, he has got still further. Now he prefers to jump rope, slide, whirl around, and hop for a distance on one foot. He continues to give new expression and new strength to his motor impulses.

A new element appearing in this period is the imitation by young children of the play of older children. This is as we would expect very young children to behave, since their own horizons are so limited. Their new play is characterized by adherence to rigid rules. Wooley describes it as "repetition compulsion." The little children get hold of a game, and possibly because they do not feel entirely at home in it, require that it be played precisely the same way each time. Dr. Wooley tells of a group of three-year-old children who were playing

¹³These data are derived from Wannamaker, C., "The Recreation Interview," *The Family*, 10:181-186, October, 1929. This article is the first of a series of four accounts based on recreational interviews with thousands of children at the Institute for Juvenile Research, Chicago.

"Hide and Seek." The first child to hide herself went to a point in the room where most of her body was still exposed to view, and buried her head in her hands in ostrich-like fashion. She was in no sense concealed from the rest. Each of the other children, when it was his or her turn to do the hiding, followed the example set by the first child of remaining almost completely within view of the rest. Any attempt on the part of a child to depart from this rigid style of playing the game was greeted with loud protest. The tendency to follow rules with exactness is thus characteristic of the child's first introduction to social play.¹⁴

Most promising are the beginnings of group activity. Children in this age-period play with others toward a definite end. It is a common sight in the nursery school to see children co-operating in the building of a house with big blocks, yet at this time the sense of group unity is but poorly developed. The important thing in the child's mind is the end to be achieved. He plays with others because the enterprise is impossible without collective action.

3. *Later childhood.* In addition to the continuance and strengthening of play trends already established, this third period of childhood reveals at least three new elements: (1) a utilitarian interest, (2) a group interest, and (3) a competitive interest.

We can indicate best by means of illustration the emergence of a practical interest. When he is six or seven years old, the child will be content with his sand pile. But when he is eight or nine, the same child will want to build a hut or cave. Besides, the structure will have to be big enough for shelter. The child wants now to create something real, something useful. This spirit of realism in part carries over to his reading. His interest in fairy tales wanes, his interest in adventure stories waxes. At this period the most popular "movies" are cowboy and serial pictures, suggestive of the new emphasis.

Now we witness the real blooming of the child's social consciousness. He becomes sensitive to the presence of his age-

¹⁴Wooley, H., in *Handbook of Child Psychology*, Edited by Carl Murchison, Clark Univ. Press, Worcester, 1931, p. 36. In the same volume, p. 405, C. Buhler offers confirmatory evidence of this tendency.

peers. He merges with others to form a gang. The idea of a secret society appeals to him, satisfying in a way his desire for adventure. It is at this stage of his play development that the child stands most in need of direction by his elders. He is highly suggestible and follows quite readily any leadership that satisfies his desire for new experience.

For all his interest in his gang at this time, the child readily falls out with his associates because of his competitive nature. Competition militates against the permanence of the gang. It interferes with the smoothness of play activity generally. In their games during this period the children show little ability to take and keep a subordinate part. If it is a game of baseball that is being played, for example, all the boys will want to pitch or bat. There will be no subordination of self in the interests of the group. Each child wants to "star." For this reason this period has been called one of competitive socialization. Actual "team play" does not come until adolescence. With pubescence, however, true coöperative play appears. It is not individual glory that now looms large but rather the glory of the group. Organization is highly esteemed, revealing the child's new sense of institutional loyalty.

Play trends. We may note two general directions in which the play development of the child moves: (1) increasing popularity of certain pursuits and improvement in performance, and (2) increasing conservatism in interests.¹⁵ As to the first of these tendencies, it is interesting to observe that once a play activity has been embraced, it seldom disappears entirely from the child's experience. However, the child soon develops play-preferences. Investigations disclose that those games which gain in popularity with increasing age include basketball, tennis, hiking, and baseball, for both sexes; whereas boys show a preference for hunting, shooting, workshop play, and riding a bicycle, and girls show partiality toward volley-ball, skating, and needlework. The games most quickly laid aside by children as being "too babyish" are on the order of farmer-in-the-dell, playing house, tag, and jumping rope. With increasing age there is

¹⁵After Marshall, H., "Children's Plays, Games, and Amusements," in *Handbook of Child Psychology*, Edited by Carl Murchison, Clark Univ. Press, Worcester, 1931, pp. 519-520.

increasing preference for games involving *some sort of ball*, and *the element of chance*.

How shall we account for the increasing conservatism of the child's play as he matures? The younger child is not content in his play to follow the beaten path. He wants to walk on the curb-stone or balance himself on the edge of a fence or walk a tight-rope. But when he grows older he generally comes to like best the traditional games, governed by established rules. This change of interest is only an expression of the larger socialization of the child which society ordinarily effects. As the child matures he comes more and more under the leveling influence of custom.

This trend is not to be noted entirely without regret, especially in view of the accompanying tendency of the child to restrict his play interests to a very few lines. Compare the long list of play activities of the five-year-old child with the very limited recreation of the fourteen- or sixteen-year-old child. In part, this constriction is inevitable. It represents adjustment to society's demand that the child assume serious responsibilities. But in part too it represents a tragic narrowing of interest in play. It is significant that in the representative cases cited by the Chicago Institute for Juvenile Research major reliance for play-satisfaction is placed upon the cinema. These records show these children attending motion pictures two and three times a week.

Play variations. In our discussion of play stages and play trends up to this point we have had in mind conditions that obtain among children generally. But in this day when individual differences are being so definitely stressed it is hardly necessary to emphasize the idea that no two children play alike. There are individual differences to be seen in the play of children as in all their other behavior. But, in addition to these personal influences, the play of children is modified by at least three other considerations: (1) intelligence, (2) sex, and (3) environment.

The evidence shows conclusively that a child's mentality conditions his play experience. Both mental inferiority and mental superiority find expression in the child's recreational activity. As we would surmise, low intelligence is reflected in

both a poor play attitude and a deficient play capacity. Hall¹⁶ shows how a child's mentality is betrayed by his play action, and Gesell has used play situations as actual criteria of the child's mental progress.¹⁷ On the side of mental superiority, Terman provides us with his study of 643 gifted children ranging from two to thirteen years of age.¹⁸ Contrary to the popular opinion, gifted children enjoy a well-balanced play program. When compared with other children, they show in their play (1) less interest in competitive games, (2) slightly more preference for solitary play, (3) choice of older playmates, and (4) greater versatility of accomplishment. The bright child as a rule has more hobbies than the normal child. His collections are more numerous and attractive. Although he devotes to play slightly fewer hours a week than do his normal neighbors, his investment-returns are greater.

What part of a child's play interest may be charged to sex? We know that little boys and girls continue to use the same toys until they are three or four years old, apparently without special awareness of this identification. Not until they are about six years old does any pronounced demarcation of interest occur. Then girls show a preference for play at housekeeping, and boys show a leaning toward play that has to do with industry and transportation. Before this time, when boys and girls "play house," they interchange roles. After this time, boys scorn this kind of play; or, if they consent to it, insist upon assuming the rôle of the father who is away from home most of the time earning the livelihood. This movement of the boy away from girls' play and from play with girls continues. From the time he is eight years old, he associates increasingly with members of his own sex. He forms with them into gangs, from which girls are rigidly excluded. Then comes a time when even to have girls about seems nothing short of disgrace to him. So the differentiation of play interests between the sexes continues, until at

¹⁶Hall, W. L., "Intelligence as Indicated by Reaction in Games," *Training School Bulletin*, 20:106, 1923.

¹⁷Gesell, A., *The Mental Growth of the Pre-School Child*, Macmillan, New York, 1925 (See section on "Normative Summaries").

¹⁸Terman, L. M., et al., *Genetic Studies of Genius*, Vol. I, Stanford Univ. Press, Palo Alto, 1925.

adolescence the cleavage shows itself in the sports which each sex prefers. Why is it that girls prefer basket-ball and skating, while boys prefer football and baseball? Why do girls lean toward sewing and dancing, and boys toward tool-work and hunting? Unquestionably the forces of sex and the forces of tradition combine to create these divergent tastes.

In accounting for the play habits of a particular child, we must take note especially of his environment.¹⁰ Although there exists in every child the impulse to play, the direction this impulse will take depends upon the forces that operate in the child's experience. The child's culture will in entirety determine the games he will play. Community resources will seriously affect the nature of his frolicking. But most important of all the influences is his family experience. Whether his play impulses will be fostered or stifled rests upon the attitudes of his parents toward play; and the general form of his play will depend upon the make-up of his family group. Various studies have shown, for example, that children in small families become inclined toward individual or solitary games, whereas children in large families come to prefer group games.

V. Play Equipment

Since play is the child's serious business, it is clear that he must have tools with which to carry on his trade. He cannot hope to prosper in a vacuum. Four things must be provided for worth-while play: (1) playthings, (2) play-space, (3) play-time, and (4) playmates. Let us look into these requirements.

Playthings. If we think of play as a means of child development, then playthings are the tools of his progress. The kind of play materials we put into the child's hands becomes a matter of vital importance for his welfare.

1. *General considerations governing choice.* There are certain basic considerations that should in general influence our choice of play materials. Five of them may here be noted. (a) Playthings should be *capable of a variety of experimental uses.*

¹⁰Cf. Lehman, H. C., "Community Differences in Play Behavior," *Pedagogical Seminary*, 33:477, September, 1926.

If a toy serves only one purpose, the child learns little from it and besides he runs the danger of becoming weary of it. Blocks are among the best instruments of play for the reason that they lend themselves to a multitude of uses. Balls are good toys because they can be rolled, bounced, thrown, squeezed—in a word, subjected to a great many uses. Dolls stand approval as toys because they may be dressed, put to bed, cared for, and enjoyed in a number of ways. On the other hand, less desirable would be a train that runs around a track when wound, for this toy allows the child the single manipulation of winding the key. (b) Toys should be *durable, washable, attractive in form and color*. Beautiful toys can be used to cultivate the child's æsthetic sense, as well as for play. And, as for having washable toys, they can be used to teach the child the proper care of his things. He can be taught to keep his belongings clean, even as he keeps himself clean. Durable toys serve well in establishing a sense of permanent possession. A linen or an oilcloth book is thus, for example, more desirable than a book made of paper. (c) Next, toys should be *appropriate to the age and nature of the child*. About this matter we need say nothing at this point, for we devote the next main division of our discussion entirely to it. (d) Care must be exercised to secure *a balance of toys for active and quiet play*. There are on the one hand children who play violently to the point of exhaustion, and on the other hand children who almost never engage in vigorous activity. Health and development require that these two types be brought into some sort of balance. Swings, slides, frames for climbing—these are the kind of things that give good motor practice. Sewing, singing, reading, checkers—these make for quiet play. (e) Finally, toys should be *few in number*. We often see children burdened with a multitude of playthings. The menace of too many toys lies in the result that the child retains no sense of appreciation for any of them.²⁰

2. *Suggestive list of appropriate playthings*. Having in mind these general criteria by which to choose the child's toys,

²⁰For discussions of general considerations involved in choosing toys, see Thom, D. A., *Everyday Problems of the Everyday Child*, Appleton, New York, 1927, Chap. XX; also Arlitt, A. H., *The Child from One to Six*, McGraw-Hill, New York, 1930, pp. 157 ff.

we are now in a position to name definite objects which meet these requirements. Since the child's play interests alter with his advance in years, we shall find it helpful to present lists appropriate to a number of age periods. The materials noted for each period will represent only the *kind* of playthings suitable for a child of that age. The notations are in no sense exhaustive of what is desirable.²¹

BIRTH TO ONE AND ONE-HALF YEARS

Animals: rubber and celluloid, soft and stuffed
 Balls: rubber and celluloid
 Beads: large, wooden, strung on heavy cord
 Blocks: rounded corners, brightly colored, nested
 Dolls: soft
 Picture books: linen, oilcloth
 Rattle
 Rings: rubber, ivory, celluloid
 Spools: wooden, strung on heavy cord

When we come to the next age-period, we find it helpful to group materials under three heads: equipment for motor, dramatic, and creative play. Under these labels we shall record only the additions suggested for each period.

*Motor**Dramatic**Creative*

ONE AND ONE-HALF TO THREE YEARS

Ball: large	Books: animal	Beads: large, to
Frame: for climbing	stories, nursery	string
Kiddy-Kar	rhymes, Mother	Blocks: large, for
Sand box	Goose, realistic,	building
Sand toys: pail,	etc.	Peg board and pegs
shovel, spoon,	Doll set: unbreak-	
sieve, funnel	able doll, cradle	
Swing	Musical instru-	
Wagon	ments: bells, tom-	
	tom	

²¹A helpful list of playthings appropriate to various ages appears in Wolf, A. W. M., and Boehm, E. L., *Play and Playthings* (pamphlet), Child Study Association of America, 221 West 57th Street, New York, 1930.

THE CHILD

THREE TO FOUR YEARS

Garden tools
 Kiddy-Kar: with
 pedals
 Seesaw
 Slide: small

Books: nursery
 songs
 Doll: carriage
 Housekeeping set:
 Miniature
 Cleaning
 Dishes: unbreak-
 able
 Laundry

Blackboard
 Chalk
 Crayons: Jumbo
 Paper: drawing

FOUR TO SIX YEARS

Auto coaster
 Roller skates
 Sled
 Snow skates
 Velocipede

Costume suits
 Doll: house and
 furniture

Clay: modeling
 Paints: basic colors,
 easel
 Paste
 Scissors: rounded
 end
 Sewing cards: large,
 colored yarns,
 blunt needle
 Weaving mats

SIX TO EIGHT YEARS

Croquet
 Football
 Ice skates
 Skis

Cash register
 Dolls: china
 Transportation
 toys: trains,
 boats, aeroplanes

Erector set
 Knitting set
 Printing set
 Puzzle boards
 Sewing set
 Tool chest

EIGHT TO TEN YEARS

Baseball
 Bicycle
 Golf outfit
 Tennis

Cooking set: child's
 Electric iron, cook-
 ing stove, train
 Typewriter

Basket-making out-
 fit: raffia and
 reeds
 Carpentry tools
 work bench
 Mosaics
 Weaving loom

These lists supply a number of playthings in each division sufficient to suggest to those responsible for the play of children the nature of adequate equipment. Later in this chapter we shall give further explanation of the choices we have made here.

Play-space. When the homestead economy prevailed, it was no problem to supply the child with plenty of out-door play space. The farm afforded an almost ideal play setting. But the modern apartment home presents a picture in sharp contrast. Its construction ordinarily makes no allowance for play space either within or about the building. For this reason, many students of the family declare emphatically against the apartment-home as a residence for the child. More recently, however, there has been a movement to incorporate play space in the construction-plan of apartment buildings. A number of the newer apartment houses in New York City, for example, are equipped with well-furnished nursery quarters, gymnasium, and out-door play space for the children of the occupants. With medical literature stressing the indispensability of fresh-air and sunlight for health, it is imperative that children enjoy such opportunity for open-air play. A small yard-space equipped with home-made apparatus for vigorous exercise (boards, boxes, swings, etc.) will keep the child close at hand, while it provides him with means for his development. Ideally the child ought also to have a special room set aside for him as a play nursery.²² Then he may engage in boisterous sport without causing his elders annoyance. Such a room can be fitted with certain devices for active play, to which the child may resort when inclement weather forces him indoors: a trapeze, a jungle gym, a ladder, a doorway swing, etc. Here too the child keeps his equipment for quiet play, for dramatic play, and for creative play.

Play-time. When we view play as the means through which the child develops, we realize there is little danger of too much play, provided the play is properly balanced. At the beginning of his experience, there are only two matters that need to be shown equal consideration with play: eating and sleeping. For the first two years of life the child requires a minimum of

²²For a detailed description of the ideal nursery see Blanton, S. and M. G., *Child Guidance*, Century, New York, 1927, p. 113.

sixteen hours of sleep. Each successive year this amount is reduced by one hour, so that the child between five and six years old needs a minimum of twelve hours of sleep. This time is made up of an unbroken night slumber and two rest periods, morning and afternoon. As the rest periods are relinquished, the morning interval is abandoned first. Later, when the child goes to school, it often proves impossible to enforce a long rest period after classes. But even a short period of inactivity for all children in the middle of the afternoon is recommended by pediatricians.²²

With the claims of sleep and eating fixed in mind, it is simple to arrange the child's play schedule. The young child will sleep after he has eaten, so in his case play must precede meal-time. Only one reservation needs to be made: he must not appear at table tired from over-active play. To assure this, it is well to have quiet play follow rather than precede active play. Also, one exception will have to be allowed to the practice of play before meal-time. Many a city father can find no time for companionship with his children unless an after-supper period is provided for play together. Nothing but good can come from this fellowship if it is one of quiet play. Since the child must soon go to bed, it is certainly in the interests of sound sleep that his play at this time shall not be more than mildly exciting. Quiet games meet this requirement. Reading serves splendidly. In addition, the child's going to bed may itself be turned into play. His preparation may be made ritualistic. He can delight in putting his clothes "to bed" in order, in turning on the tap for his bath, and in appropriate "farewells."

As the child grows older, school naturally claims most of his former play time. In his study of school children, Terman found that the time allotment for play varied considerably. It ranged from one to five hours daily. The average for superior children was something above two hours a day at play. Since it is known that gifted children give only a little less time to play than do children of average intelligence, about two and one-half hours a day represents a fair average for American children. But each child's situation must determine for him what time allowance for play he should make. No standardized time-for-play schedule should be applied to all children. The one thing

²²Cf. Scham, M., *The Tired Child*, Lippincott, Philadelphia, 1926.

we can perhaps say with certainty is that a portion of every day ought to be conserved for play activity.

Play-mates. We come finally to the child's most important single play need, his need for companions. A child ought to spend at least a portion of every day in the company of other children of his own age. There are two main reasons for this. First, children develop specialized patterns of behavior for various situations. Hence, if they are to learn to adjust themselves normally to other children, they must have experience with other children. If they do not have such experience, they grow up strangers to their own kind, and totally unfamiliar with ordinary child activities. How clearly we see this in the confession which John Stuart Mill makes concerning his own solitary play as a child. His father forbade him to have any association with other children, so as to keep his mind from being "contaminated" by them. He had no boy companions and as a result grew up to be inferior in the achievements to which children everywhere attain. A child has need of the company of other children, second, for the reason that they make his best teachers. They prepare him not only for life among other children, but for life at every point. Daily experience in the nursery school confirms this observation. Child after child comes into the school with a rough-edged nature which his parents have despaired of correcting. It is not long before the pressure of the group of little folks rounds off these sharp edges. Children want the esteem of their peers, and they pay the price of conformity to get it. Because other children exert such decided disciplinary influence, they are indispensable to wholesome development.

The child is doubly blessed if, in addition to companionship with other children, he enjoys the companionship of his parents. Family fellowship is so rare a thing today as to make this observation anything but superfluous. Social forces conspire for the most part to send the members of families out along separate paths in pursuit of pleasure. However, working against this tremendous influence for individualization of play we find organized efforts to restore family recreation. To cite a single specific instance, the City of Alhambra, California, through its Home Education Department, has fostered in that community a "family fun" evening. Parents are urged to consign one evening

a week to collective recreation—one evening a week when all members of the family arrange to be present for play which is planned and participated in by all. This experiment has prospered. The idea commends itself to all intelligent parents.

VI. Principles of Constructive Play

Constructive play is developmental. The play of many children, however, consists mostly of mere fun. Such other value as results from it is incidental and accidental. Take, for example, the play of large numbers of city children who run the streets and congregate on doorsteps for idle chatter until late hours of the night. Or, take the even more harmful play involved in day-dreaming. If pleasure were the only consideration involved in good recreation, day-dreaming would be superlative. Play should have value for the child other than fun. It should be an aid to better health, or finer motor coördination, or greater skill, or increased sociability, or more pronounced inventiveness. Besides, play which is constructively developmental can provide as much pleasure for the child as play which is not.

Constructive play is creative. In many homes, however, the child's play equipment consists entirely of purchased, mechanical toys. They require nothing of the child but an act like the turning of a key that winds a spring. The tragedy is the greater because the child did not start his play life without the creative spirit. Quite to the contrary, Croswell found that at the age of six more than 30 per cent of children's play involved common objects put to uncommon uses. But by the age of ten the ratio had dropped to 10 per cent, and it decreased rapidly thereafter until it became fairly negligible.²⁴ Creative play was discouraged through parents denying their children the free use of home resources and supplying them instead with mechanical toys.

If certain play materials do not conduce to creative effort, what shall we say of commercialized recreation, and especially "the movies"? There is unquestionably no play activity that can compare with the motion picture in the appeal it has for Amer-

²⁴Forbush, W. B., *Manual of Play*, Macrae Smith, Philadelphia, 1914, p. 16.

ican childhood. It has been estimated that in 1929 one-fourth of all admissions to motion-picture houses was paid by children under twelve years of age.²⁵ A study in the city of Toledo ten years earlier showed the same ratio. Of the 80,000 children under eighteen years of age then in Toledo, 79,000 attended the motion pictures at least once a week. In a certain school district the average attendance for all the children was twice a week, and 20 per cent went three or more times.²⁶ Contrast this appeal with the present widespread protest against the usual run of motion pictures as play for young children. In a poll of expert opinion recently taken by a prominent magazine, the consensus was overwhelmingly to the effect that children under ten years of age ought not to attend motion pictures as they are at present exhibited.²⁷

What a child does for himself educates him far more than that which is done for him. Hence the value of raw materials permitting the child to exercise his imagination: chalk, crayons, paints, clay, paste, carpentry tools, a sewing kit, and the like. Hence the value of spontaneous play which cultivates inventiveness. One father had his small daughter's consent to this arrangement: he would spin a story out of his imagination provided she would match it with one of her own. This exchange delighted her. Besides she soon developed a rare faculty for telling stories. There can be no doubting the superiority of play which is both active and creative.

Constructive play is progressive. The child's play should advance from simple to complex activity through a series of graded stages of difficulty. Let us follow through a few specific progressions in illustration of this principle. Early the child's locomotive play takes the form of crawling. Thence it proceeds to walking, next to running, then to jumping. If the principle of progression is to continue, what shall follow? After he has learned to jump, the child may be encouraged to jump rope. Then he can advance to a new type of locomotion, roller-skating. And so on, passing from one level to another that is higher. In

²⁵"The Child and the Movie," *Hygeia*, 7:278, March, 1929.

²⁶Blanchard, P., *The Child and Society*, Longmans, Green, New York, 1928, pp. 189-190.

²⁷"Should Children Go to the Movies?" (symposium), *Parents' Magazine*, 5:14, February, 1930.

the same way, the Kiddy-Kar, the velocipede, and the bicycle form a natural progression from the simple to the more complex. Good play is thus never static.

Constructive play is pervasive. Play is a spirit which can be made to pervade large areas of the child's life. As such it is more than recreation; it is an attitude toward activity. The experience of one mother shows how far-reaching in its beneficent effects the play attitude can be. This mother realized that most children come to fear medical men, and especially dentists. She determined to obviate that fear in her own child's experience. Accordingly she had him accompany her to the dentist's office repeatedly while she was having some work done of a painless nature. Always her own attitude toward the next appointment was one of pleasant expectancy. This influenced her little son favorably. Besides she made his visits to the dentist conditional upon his good behavior. He was made to feel that it was a privilege to join her. In connivance with the dentist, she arranged to have her son's interest in dental equipment aroused. The child was encouraged to watch closely while the dentist worked. He was permitted to handle and examine the instruments. At home after each visit the boy was encouraged to "play dentist." He used pecan nuts, from which the meat had been "extracted," into which to pour his home-made fillings of "mortar." Such devices as nut-picks were his instruments. A real play-interest in dentistry was cultivated. When it came his turn to go to the dentist in earnest he was not handicapped by an anticipatory attitude of fear.

The value of the play-spirit is widely recognized. Business concerns selling children's products devise various schemes for cultivating fondness for their goods. Manufacturers of cereals and tooth-paste distribute games that may be played to create partiality toward their products. There are, indeed, few activities in which children normally engage that cannot be made to yield joy. This is an encouraging and challenging fact, so far as guidance is concerned. In the play attitude the leaders of children have one of the mightiest aids to the realization of their purposes that exists. It is their business to have the spirit and the skill to engender a pervasive play-attitude in the children under their direction.

VII. Subsequent Discussion

Play looms large in the early experience of the child. But before long the school claims him, and a new phase of his development begins. To the consideration of this new line of interest, we are now prepared to turn. Our next topic is "The Child and His School Experience."

READINGS

1. Arlitt, A. H., *The Child from One to Six*, McGraw-Hill, New York, 1930.
(Chap. XI—According to this writer, what considerations should govern the choice of playthings? How do these suggestions compare with those given in the chapter?)
2. Blatz, W. E., and Bott, H., *Parents and the Pre-School Child*, Morrow, New York, 1929.
(Chap. VI: "Habits of Play," p. 113—What theories of play are considered? What social factors are involved in play?)
3. Croswell, T. R., "Amusements of 2,000 Worcester School Children," *Pedagogical Seminary*, 6:314, 1899.
(What play activities appealed most to these children? Why?)
4. Davis, J. E., "Rôle of Fantasy in Play Life," *American Physical Education Association Research Quarterly*, 1:34, March, 1930.
(How do the child's imaginative powers enter into his play? How may the degree of fantasy in play be regulated? Does it need control?)
5. Eastman, F., "What Can We Do about the Movies?" *Parents' Magazine*, 6:19, November, 1931.
(What is his indictment of the movies? His evidence? His program?)
6. Fosdick, H. E., "Living for the Fun of It," *American Magazine*, 109:57, April, 1930.
(What philosophy of play is revealed by the writer? What obstacles lie in the way of its adoption by most persons?)
7. Furfey, P. H., "Pubescence and Play Behavior," *American Journal of Psychology*, 41:109, January, 1929.
(What changes in the nature of children's play occur at this time?)

8. Hulson, E. L., "Analysis of the Free Play of Ten Four-Year-Old Children," *Journal of Juvenile Research*, 14:188, July, 1930.
(What scientific value has the method of "continuous observations"? What did you learn about the play of four-year-olds?)
9. Johnson, H. M., "Play Materials for the Pre-School Child," *American Childhood*, 16:10, December, 1930.
(Make a list of the four primary suggestions made as to proper play equipment for young children. What is the writer's professional connection?)
10. Knopf, J. M., "Worth-while Play," *Parents' Magazine*, 6:30, June, 1931.
(What are the characteristics of worth-while play? Do you agree?)
11. Lee, J., "Children and Tomorrow's Leisure," *Parents' Magazine*, 6:13, July, 1931.
(What bearing does children's play have upon the general social life of a period?)
12. Lehman, H. C., "Growth Stages in Play Behavior," *Pedagogical Seminary*, 33:273, June, 1926.
(Outline the play stages as given in this article. How do they compare with those discussed in the chapter?)
13. Lehman, H. C., and Shikles, G., "Study of Play in Relation to School Marks," *Educational Administration*, 14:238, April, 1928.
(What two conspicuous differences exist between the play responses of good and poor pupils? How account for them?)
14. Lehman, H. C., and Wilkerson, D. A., "Influence of Chronological Age Versus Mental Age on Play Behavior," *Pedagogical Seminary*, 35:312, June, 1928.
(How does physical maturation affect play? What is the effect of intelligence upon play? Which of the two is more important?)
15. Lehman, H. C., and Witty, P. A., "Play Interests as Evidence of Sex Difference in Aesthetic Appreciation," *American Journal of Psychology*, 40:449, July, 1928.
(How do the play interests of boys differ from those of girls? Are these differences due to inheritance or to social experience?)
16. "Nineteen Recreation Principles," *Homiletic Review*, 103:484, June, 1932.
(Compare these principles with those given in the chapter. What have they in common? How do they differ?)

17. *Recreation* (formerly *Playground and Recreation*), is the magazine of the National Recreation Association, 315 Fourth Ave., New York.

It provides an abundance of material on the child and play. The references given below, from a single issue, are suggestive of the value of this magazine for the study of play.

Recreation, Vol. 25, April, 1931.

"Educating Parents for Home Play"—p. 17

"Family Experiment in Home Play"—p. 22

"In the Child's Play World"—p. 9

"Play and Play Material"—p. 18

18. Rogers, J. E., *The Child and Play*, Century, New York, 1932.

(Chap. III: "Play in the Home"—What steps are certain cities taking to educate parents in the art of home-play? Upon what data is this study based? In what connection was it undertaken?)

19. Snyder, A. M. and M. A., "Correcting Behavior Problems through Play," *Parents' Magazine*, 4:16, October, 1929; also 4:24, November, 1929.

(What specific instances of such correction are given? Why is play so valuable as a corrective?)

20. Stutsman, R., "Learning through Play," *Ladies' Home Journal*, 47:197, November, 1930.

(What does the child learn through play? What are the advantages of education through play? Disadvantages?)

21. Van Alstyne, D., *Play Behavior and Choice of Play Materials of Pre-School Children*, University of Chicago Press, Chicago, 1932.

(Select any two chapters for reading. Prepare two accounts: (a) the nature of child play; (b) the nature of playthings.)

CHAPTER X

THE CHILD AND SCHOOL EXPERIENCE

"All that society has accomplished for itself is put, through the agency of the school, at the disposal of its future members."

—JOHN DEWEY

I. Introduction

Four primary aspects of the child's school experience will claim our attention in this chapter: (1) the nature of school experience, (2) maladjustments in school experience, (3) causes of maladjustment, and (4) educational readjustment. First, it will be helpful to make clear the special nature of what we call "school experience." How is it to be distinguished from other experience which also educates the child? Second, it will be profitable to consider ways in which children fail to adjust to their school activity. What are the problems that children present as pupils? When we have stated these difficulties, it will be appropriate for us to examine, third, the causes that underly them. Why do certain children not prosper in their school life? Fourth and finally, we shall want to see what new programs are at the present time attempting to meet these basic problems of the educational life of children.

II. The Nature of School Experience

It is a matter of frequent remark that the school has no monopoly of education. It is possible to become educated without going to school and to go to school without becoming educated. This is so because all experience exerts educational influence, and the school cannot hope to encompass all experience.

The school is our special instrument for providing a certain kind of education. Its distinction lies less in its subject mat-

ter than in its manner. Its manner is its own: it is *formal* or *organized*. There are other avenues and agencies of education which lack definite, established procedure. The family group is an educational agency of this informal sort. The child learns much from his home experience. Likewise he profits from his play with other children. But none of these agencies organizes into formal techniques its efforts to educate him.

Unique values of formal education. In what distinctive ways does the school serve the child? Does formal education supplement the contributions of the family-group and play-group or does it simply duplicate these contributions? This is no idle question. There are more than a few conscientious parents who are convinced that the school has no contribution to make which they themselves cannot improve upon. Accordingly these parents undertake personally to supply their children's education. But the school has much to offer parents which they cannot themselves provide. The school claims four major advantages: (1) superior equipment, (2) trained personnel, (3) a neutral atmosphere, and (4) special discipline.

1. *Superior equipment.* The superiority of the school in the matter of equipment is so apparent that we need give this matter but passing notice. There are some homes, to be sure, which can provide more adequate materials for study than certain impoverished school boards, but these cases are exceptional. On the contrary, complaint is now often heard that schools of the present expend too much money on equipment. School buildings become ever more spacious and luxurious. They house enormous gymnasiums, swimming pools, cafeterias, auditoriums, and the like. Many schools have installed special apparatus for the performance of talking pictures. It is difficult to picture a home which can provide children as the school does with all sorts of workshops, with laboratories and laboratory materials. A community of citizens, by contributing money to a common fund in the form of school taxes, is able to afford all its children such educational tools as these same citizens, individually, would never be able to provide.

2. *Trained personnel.* If the school shows an advantage over the home in the superiority of its equipment for study, it shows an even more decisive advantage in its teaching staff.

Every state in the Union sets up some sort of educational requirements for teaching, but these same states set up no education prerequisites for parenthood. An ignoramus is discouraged from becoming a teacher but not from becoming a mother or a father. Or, to put it differently, an ignoramus is discouraged from becoming a teacher to any children but his own. To be sure, states vary enormously in the standards they require for the certification of teachers. Still, all the states have some manner of standard and many of them support standards that are even exacting. The professionally trained teacher is coming into greater and wider repute. He is presumed to be thoroughly prepared for his post. He is expected to be familiar with the psychology of the children he teaches, to know the subject he teaches, and to understand how best to teach it. He is an expert, comparable in skill to the physician or lawyer. Few parents can compare in competence with the trained school teacher.

3. *Neutral atmosphere.* The school furnishes the child with fuller resources for educational achievement, to be utilized under the special supervision of a trained teaching force. In addition, it gives the child a setting in which to work such as his home cannot supply. The school atmosphere is one of emotional *detachment*. The home atmosphere is one of emotional *attachment*. Parents naturally identify themselves with their children. They regard their children as virtually extensions of themselves. In consequence of this fact, they show peculiar concern over their children's behavior. They cannot help but feel about their children far more than they think about them. This emotional concern for the child's welfare is an expression of parental affection which we covet for all children. But it carries with itself possibility for harm. Too much emotional concern for the child's welfare may lead to exacting, unjust demands upon him. Again it may cause him to remain dependent upon his parents when he ought instead to be growing into self-reliance. As a supplement to the emotional attachment of the home, the impersonalization of the school constitutes a mighty force for mental health. The affection which a child gets at home should make him feel at home in the world; the competition on a par with others which the school provides should cause him to find his true place in it. At home he

is in a class by himself; at school he is in a class with others. At school he has a chance to live, not according to the dictates of his family, but according to the demands of the group. Because no blood bond unites her with her students, the teacher can deal with them more dispassionately than a parent. She is likely to have a truer conception of the child's capacities than the child's mother has. She is likely to be better able to deal with him without prejudice. There can be no doubting the value to the child of the impersonal, unemotional atmosphere of the classroom, a neutrality of atmosphere which results from the emphasis of the school upon the child's education, not upon his ego.

4. *Special discipline.* Although we are accustomed to think of the child's parents as having in charge the matter of his disciplining, his school experience exerts a more potent influence in this direction than does his home. The school is an unsurpassed instrument for teaching the child to get on well with other children. It disciplines him for social life. No other experience he enjoys does so much to create in him respect for (1) routine and (2) authority. School experience proceeds according to schedule. From this the child gains a sense of order, plan, and regularity. He must arrive on time and function on time throughout the day. Furthermore, he must take direction from his elders, his teachers and the members of the administration. If his parents were his sole superiors, he might conceive of them as self-appointed tyrants. But his teachers are his superiors too. From them he learns that society rates high, as a virtue, respect for constituted authority. All children who enter the school system are thus brought under the disciplinary influence of an ordered experience.

The disciplinary value of school experience is apparent for all children, but it is especially clear in the case of the mal-adjusted and the mischievous. It is not without amusement that we note the almost innumerable idiosyncrasies which children present on the occasion of their first appearance in the nursery school. To mention a few by way of illustration: one child will not take his food unless he can have his coffee; another will eat his egg only if it is hard-boiled; another will go into a temper tantrum unless he is covered at nap time with his favorite blue blanket; still another is inclined to confiscate the toys of the

other children. Frequently these matters become satisfactorily adjusted without interference by the teachers. The children themselves act as *correctives*. For one thing, the errant child can hardly fail to note that the other children are behaving differently. At home no such sharp contrast is enforced upon his attention, but at school the singularity of his conduct is impressed upon him. For another thing, he can seldom hope to continue his freakish behavior without incurring the ridicule of his classmates. Even little children tend to regard as "peculiar" any conduct which they themselves do not show. They are strong for conformity, and the weapon they wield to secure conformity is ridicule. The experience of the school is such as to indicate the frequent success of this "treatment."¹

III. Maladjustments in School Experience

For all this disciplinary and corrective influence of the school, problem pupils do exist. Their difficulties may be grouped under two large heads: (1) the educational and (2) the personal. We mean by an educational problem any maladjustment of the child to his studies, and by a personal maladjustment any failure of the child to get on well either with himself or with his associates. Thus a child at school may be maladjusted either as a pupil, or as a person, or both. However, there is no necessary connection between these two fundamental types of maladjustment. Those children who rate high in their studies do not invariably rate high in their classroom conduct. To be sure, Terman found that gifted children were superior in their social adjustments as well as in their studies.² He attributes their high standing in both respects to their high intelligence. But a study of the background of these children shows that they have come out of good homes, which makes it as reasonable to credit the home for the good conduct as the high I. Q. Other studies incline us toward the view that there is no telling from the quality of a child's scholarship what his personal conduct will be like. Paynter and Blanchard, studying children with behavior

¹ Cf. Dexter, E. H., "Treatment of the Child Through the School Environment," *Mental Hygiene*, 12:358, April, 1928.

² *Genetic Studies of Genius*, Vol. 1, pp. 73-77.

problems at child guidance clinics in Los Angeles and Philadelphia, report that these children showed no general tendency to low educational achievement.³ A child failing in his studies may be a joy to all, whereas a child who is a grief to all may excel in his studies. Partly for this reason, then, and partly for the sake of simplicity of treatment, let us give separate attention to these two kinds of maladjustment in school experience.

Educational maladjustment. The problems of children who have not made a happy adjustment to their school subjects are three: (1) retardation, (2) acceleration, and (3) misplacement. Retardation means being too far behind scholastically; acceleration means being too far ahead; and misplacement means being too far afield. Each of these problems deserves amplification.

1. *Retardation.* The amount of retardation in our public schools is amazingly high. One thorough study of this problem found about one-third of all the pupils in our schools to be retarded. This same study estimated that only about 50 per cent of all students ever complete the eighth grade, and only about 10 per cent secure a high school diploma.⁴ Since the date of this study, the proportion of all students to finish these grades has mounted. But even so the number of eliminations continues to be great. The United States Census Report for 1930 tells that there were about 38,000,000 children between the ages of 5 and 20 in this country that year. Of this total, roughly 11,500,000 were not in school, or a ratio of about one in three. The following table⁵ gives the proportion of the total number of children of a given age in school during 1930.

<i>Age</i>	<i>Per Cent Attending School</i>
5	20.0
6	66.3
7-13	95.3
14-15	88.8
16-17	57.3
18-20	21.4

³*A Study of Educational Achievement of Problem Children*, Commonwealth Fund, Division of Publications, New York, 1929, p. 62.

⁴Ayres, L. P., *Laggards in Our Schools*, Russell Sage Foundation, New York, 1909, pp. 3 ff.

⁵*Elementary School Journal*, 32:174, November, 1931.

These figures show that a very large proportion of all students separate themselves from school as soon as the law allows.

2. *Acceleration.* For a much smaller number of children the problem is one of being too far ahead. They are not too good as students, for such a thing is an impossibility. They are just too young for the grade they can achieve. If they are permitted, under our usual arrangement, to enter the grade for which they are mentally fitted, they often find themselves socially unsuited for it. They do not have happy relations with the older children. On the other hand, if they are confined to a lower grade, the lack of sufficient stimulation there serves to kill their school interest entirely. Nor is rapid promotion always successful in solving the educational problem of these gifted children, as Terman testifies in the study to which we have already alluded. In spite of the fact that seven out of eight gifted children are accelerated in their school grade (the average acceleration being 14 per cent of the child's age), still a large majority are under-graded. Tests show that they have mastered the subject matter of from one to three grades ahead.

3. *Misplacement.* Finally we need to consider those students who have become enlisted in the wrong curriculum. They are studying subjects for which they may have ability but for which they have little or no interest. These maladjustments are no less serious than the other two types we have examined, nor is the seriousness of them much reduced when the student succeeds at his course of study. We have all known adults highly skilled at their jobs but unhappy at them too. With the increasing tendency of the public schools to offer the child a choice among a number of different kinds of schooling, it is increasingly incumbent upon the guardians of the child to protect him against making a wrong selection.

Although in the nature of the case we can have no exact knowledge as to the number of students following pursuits for which they are not fitted, we do have evidence that the number is considerable. In one particular inquiry into this matter of misplacement,⁵ there were selected for investigation 100 pupils

⁵Garretson, O. K., *Relationships Between Expressed Preferences and Curricular Abilities of Ninth Grade Boys* (Teachers College Contribution to Education No. 396), Bureau of Publications, Columbia Univ., New York, 1930, pp. 42 ff.

from each of three kinds of courses offered by New York City high schools: technical, commercial, and academic. These pupils had all done good work in their respective fields. All of them were then given "inclination tests" in order to discover if their interests were congenial with the course in which they were enrolled. This study disclosed that 21 per cent of the pupils in the technical course of study were not technically inclined and that 18.8 per cent of the pupils not in this course of study were technically inclined. Of the pupils in the commercial course, 15.7 per cent showed a non-commercial bent, whereas 29.9 per cent not taking this work showed strong inclination towards it. Of the children pursuing the academic course, 34 per cent revealed non-academic leaning, while 20.3 per cent not in this course showed strong disposition for it. If we were to generalize upon the basis of these facts, we should not be much amiss in the conclusion that one out of every four children is following a course of study for which he is not best suited. The loss to society from such educational maladjustment, and the loss of happiness to the children themselves, is lamentable.

Personal maladjustment. The school demands that children be good associates as well as good students, yet not a few are ill adjusted to themselves and to their classmates. What behavior problems do school children present? It is helpful to think of two types: (1) the apparent and (2) the concealed. Certain behavior problems of school children are visible, others are not. If a child has a temper tantrum in the classroom, he makes his difficulty clear to all. If he plays truant, what he has done is apparent. But if a child has a mental conflict, he may come to class day after day without anyone's being aware of his trouble. Or, if he has an inferiority complex, his difficulty may completely escape detection. Only as these inner forces of disintegration express themselves in conduct which is visible will they come to the attention of the average teacher. If a child's mental conflict induces him to steal his teacher's purse, she may then realize that he is a behavior problem. If his subterranean turmoil leads to no such obvious outer misconduct, the inner seething may go unnoticed.

It follows that teachers, if asked to report upon the behavior problems of their pupils, will provide us with a list in which the

concealed problems are inconspicuous. Thus teachers of Cleveland report the five most common behavior problems for 874 of their pupils to be the following:

<i>Behavior Problems</i>	<i>Total Children for Whom Behavior Was Reported</i>	
	<i>Number</i>	<i>Per Cent</i>
Whispering, writing notes	653	74.7
Failure to pay attention	516	59.0
Careless in work	388	44.4
Tattling on others	367	42.0
Disorderly in classroom	339	38.8

The director of this study concludes: "Our experimental results may be summed up in two statements: To the extent that any kind of behavior signifies attack upon the teachers and upon their professional endeavors does such behavior rise in their estimation as a serious problem. To the extent that any kind of unhealthy behavior is free from such attacking characteristics does it appear, to teachers, to be less difficult, less undesirable and less significant of child maladjustment."⁷

Even without making allowance for the large number of misconduct and personality problems which teachers fail to note, the amount of reported personal maladjustment in the classroom is stupendous. Haggerty's study estimates that about 51 per cent of 800 pupils studied in Minneapolis schools showed undesirable behavior traits.⁸ Wickman's study, from which the foregoing data were cited, suggests an even larger ratio of maladjustment traits. It should be clear from these facts that the child's behavior at school is fully as significant a concern as his scholastic record. For that matter, when visiting teachers were asked to list, in the order of frequency of occurrence, the problems demanding their attention, "misconduct in school" was assigned most first places.⁹

⁷Wickman, E. K., *Children's Behavior and Teachers' Attitudes*, Commonwealth Fund, Division of Publications, New York, 1928, pp. 232, 159-160.

⁸Haggerty, M. E., "The Incidence of Undesirable Behavior in Public School Children," *Journal of Educational Research*, 12:102, 1925.

⁹*The Visiting Teacher in the United States*, Public Education Association, 1923.

IV. Causes of Maladjustment in School Experience

Why do children encounter such difficulty in their school experience? Many do not learn enough; many do not behave well. Why? There are a multitude of reasons for such maladjustment. We can secure an ordered appreciation of certain ones that are most important if we will think of them in relation to three things: (1) the child himself, (2) his home life, and (3) his school.

Although we shall for the sake of simplicity consider separately each one of these three factors, we need at the outset to note that the child's maladjustment can seldom be accounted for adequately in terms of only one of them. As a rule a full causative explanation of a child's school problem will require reference to all three factors, the child, his home, and his school. Let us illustrate this point by the case of Peter.¹⁰ He had done so poorly in arithmetic that he stood in prospect of not being promoted. Peter's arithmetic incompetence was strange. He would add simple combinations wrong and yet frequently add difficult combinations right. Somehow he had got off to a bad start in this subject. When his mother learned of his difficulty, she decided to take him in charge herself. She was determined that she should be successful with the education of her only child. When, after ample instruction from her, Peter repeatedly failed to compute a problem correctly, she would lose her patience and threaten to whip him if he did not supply the correct answer the next time. Things obviously went from bad to worse, and Peter's mother as a last resort took him to a child guidance clinic. The psychologist realized the necessity for changing Peter's attitude toward arithmetic. This result was achieved over the period of the summer vacation. Arithmetic was made fun for him by being embodied in all sorts of games. When school opened in the fall, Peter's arithmetical skill was considerably greater. However, the psychologist's request that Peter be permitted to enter the next school grade was denied. The principal decided Peter should remain on the old level, but should be advanced before the usual time

¹⁰Blanchard, P., "Attitudes and Educational Disabilities," *Mental Hygiene*, 13:550, July, 1929.

if his teacher thought him deserving of it. The teacher to whom Peter was assigned was of the same unimaginative sort as had failed to understand his need at the start. Consequently it was not long before the old emotional blockade was effective again between Peter and his arithmetic.

We see that no explanation of Peter's difficulty would be adequate which did not take into account Peter's peculiar nature, his home influence, and his school environment. However, for the sake of obtaining a fuller understanding of the rôle of each of these three factors in the production of maladjustment, we are warranted in considering each one separately.

Deficiencies of the child. If a child does not get on well at school, we first look into his own make-up for possible explanation of his difficulty. The special deficiencies that children exhibit lend themselves to a threefold classification: (1) the physical, (2) the mental, and (3) the emotional. Let us see how defects in each of these fields hamper school adjustment.

1. *Physical.* Although the exact relationship between maladjustment and physical deficiency has not been determined, it is clear that the two are in many cases causally related. For instance, in her study of problem children in Los Angeles and Philadelphia, Blanchard found that about one-third of the total group had some kind of eye defect or disease.¹¹ Surely these problem children were doing less well in their studies than would be the case if they were free from such defect. We mention eye trouble in particular because its interference with easy reading is apparent; and the ability to read with comfort we know to be fundamental to success in most school subjects. It is reasonable to believe, however, that other physical defects in similar ways act as deterrents to good school work.

Physical handicaps are as likely to work damage to a child's personality as they are to impair his school work. We see this clearly in Dick Boyd's case.¹² He is a good student but a bad boy. His teachers complain that he disorganizes their work with his disorderliness. He is prone to fight with the other children,

¹¹Groves, E. R., and Blanchard, P., *Introduction to Mental Hygiene*, Holt, New York, 1930, p. 209.

¹²Zachry, C. B., *Personality Adjustments of School Children*, Scribner's, New York, 1929, p. 121.

even without provocation. What does a study of his case show? He has an unusually bad health history. At the age of two he caught cold following a tonsillectomy. His sinuses became infected; and they have had to be opened twelve times in the eight years that have elapsed since the initial infection. He has already had three adenoid operations. At six he had mumps and measles, at seven German measles, chicken pox at eight, and whooping cough at ten. At present he has an under-sized pituitary gland and is lacking in glandular balance generally. It is the opinion of the experts who have his case in charge that his physical disabilities have engendered inferiority feelings within his mind. His misbehavior is in turn the outcome of his compensatory striving for power.

2. *Mental.* In a study which she undertook into the question of why children leave school, Helen Wooley concluded that the four most important reasons, in order of significance, were the following: (1) the mental ability of the child, (2) the attitude of his family toward education, (3) the child's health, and (4) the economic status of his family.¹³ Other studies confirm the conclusion that lack of mental ability contributes more than any other one factor to lack of school success. A great deal of mischief is done in school work not alone by a lack of general intelligence, but as well by any one of a number of specific intellectual deficiencies which the child may have. Children who otherwise show normal intelligence may be burdened by a special reading disability. Others can manage happily all their studies but arithmetic, or spelling. With special, individual instruction these children often make considerable progress along the line of their natural disability. Finally, mental ability is specialized. A child who cannot cope successfully with language and subjects entailing language skill may nevertheless show marked ability for dealing with material objects. A child who does not have an "academic mind" may have a "commercial mind" or a "technical mind" or a "musical mind" or a "social mind." In our discussion of misplacement we observed how one out of every four or five students has got into the wrong kind of curriculum. It is obviously a cause of

¹³Wooley, H. T., *An Experimental Study of Children*, Macmillan, New York, 1926, p. 725.

much poor school work that so many children are mentally unsuited for the sort of effort they are making.

3. *Emotional.* Children bring their emotional difficulties into the classroom with them, and in addition they often cultivate new emotional problems in connection with the new experience of going to school. If a child enters upon his school life already harboring a personality problem, his school experience may make it worse. The school provides a new situation for the child, and one which is not without its strains. At home he has had the support and encouragement of his mother and father. Now for the first time the child is obliged to rely upon his own resources. If his first experiences at school prove to be unpleasant, they may develop within him a distaste for the classroom. The child who dislikes going to school is a potential problem child.

Deficiencies of the home. We have seen that, next to mental incompetence, faulty home situations conspire most powerfully against successful school experience for children. The school must in every case build upon the foundation which the home supplies. We may recognize two home situations which militate against good school adjustment: the first is economic poverty, and the second we may call "spiritual poverty."¹⁴

1. *Poverty.* We need say little about the effects of poverty upon the school life of children, for they are obvious. Material want shows directly in the large number of children whose economic help is needed by their families. Hours not given over to actual attendance at school are often taken up with remunerative labor. As soon as the law allows, many forsake their schooling entirely. But these direct results of poverty are not the only dire ones. Another menace of poverty is that it establishes feelings of inferiority in the minds of many of these social unfortunates. Every attendance officer knows that children will often play truant rather than appear among their schoolmates poorly clothed. The school provides a situation where economic differences in the homes of children are easily accentuated.

¹⁴For a good discussion of the influence of the home upon the child's school life, read Sayles, M., *The Problem Child in School*, Commonwealth Fund, New York, 1926, Chap. I: "Parental Attitudes."

2. *Spiritual poverty.* Material poverty is not the only sort of lack that many homes show. There is present far too often an immaterial poverty that exercises an even greater negative influence upon the child's school experience. It is possible to distinguish in particular two kinds of home situation that do harm to the child's schooling: (1) the one that denies him encouragement in his educational efforts, and (2) the one that denies him a wholesome, harmonious atmosphere.

There are many children who in their struggle with their studies get no sympathetic support from their parents. In some cases parents do nothing positive to hinder the child's progress, but they do nevertheless discourage the child by their failure to encourage and assist him. In other instances, children are obliged to study under all sorts of limitation: no privacy, no quiet, no equipment. In still other situations, the child's parents show a decidedly hostile attitude toward his school work.

Fully as hampering to educational achievement as the above is the home where discord abounds. Tom P. came out of such a home. He was the youngest son of parents who wrangled continually when together. Evenings after dinner his father would forego his family for his club. Tom had a good mind but began to falter in his studies. His teacher said he seemed not to be interested in the class proceedings. He was not unruly. He merely sat quietly in his seat, gazing into space. With what his mind was occupied we can with some assurance specify. The child who comes from a happy, helpful home carries with him great impetus to a successful school experience.

Deficiencies of the school. The school itself must assume a considerable portion of the responsibility for the maladjustment of children in school experience. Yet awareness of this fact is not widespread. Ordinarily blame for school failure is attached to the other two factors, the child and his parents. We see this slighting of the responsibility of the school in an unwitting act of the national body of visiting teachers. It is the business of the visiting teacher to serve as intermediary between the school and the home in the solution of individual pupil problems. In a survey undertaken by their national association, visiting teachers were requested to list the problems most

commonly submitted to them for adjustment.¹⁵ Their replies show that they have been concerned with investigating chiefly certain failings of the child and certain weaknesses in his family experience. In only a few cases is the child's school situation regarded as the primary cause of his maladjustment. Apparently it is taken for granted that the child should be the one to make his adjustment to the school situation, not the reverse. But the idea that "the king can do no wrong" is one which we must hesitate to apply to any school system, since there are three major points at which the schools may readily contribute to pupil maladjustment. These are (1) school policy, (2) school procedure, and (3) school personnel.

1. *Policy.* Under the law all children not physically or mentally incompetent must attend school up to a certain age. In some states the law reads that a child must continue at school through a certain grade, say the seventh, before he becomes eligible for a permit to work. However, many children do not have the sort of intelligence necessary to complete that grade. If these children are by law obliged to continue at tasks for which they are incompetent, their maladjustments are plainly aggravated. A system of compulsory school attendance can be justified only when a suitable curriculum for every kind of child is available. Before attendance of all is required, this variegated curriculum should be assured. Where such a diversified program is lacking, the law simply "sentences" many children to unfruitful hard labor at school.

2. *Procedure.* There are hazards to the personality of the child not only in the kind of education he receives but in the way in which he receives it. Consider the matter of the *pressure* of classroom procedure. Psychology and physiology have both made it very plain that the interests of health and achievement are best served through a succession of short periods of work accompanied by interludes of play. For all this, our usual school procedure calls for a several-hours stretch of work both in the morning and in the afternoon, unbroken except for a single brief play period in mid-morning and mid-afternoon, and the noon-day recess. Mental hygienists are of the opinion that the fatigue

¹⁵See Table, p. 103, Oppenheimer, J. J., *The Visiting Teacher Movement*, Public Educational Association of New York, 1924.

which accumulates in consequence of this unbroken strain underlies much of the irritability and mischievousness of problem children.

Another phase of the pressure-element of school procedure appears in the everlasting *competition* of the classroom. Children going to school early catch the idea that they are involved in a sort of contest, in which the prizes are good grades and promotion. The trick is to do better than the rest, but not necessarily to do one's best. Each child is not so much in competition with himself, to see how well he can do, as he is in competition with all the other children. If the teacher holds recitations, honors generally go to the fast-thinking pupils. The first to respond to the teacher's questions are the ones who recite, and the rest through discouragement soon cease to respond at all. Where plain indifference to school work does not result, fear of it may develop. The literature of mental hygiene makes a great deal of the fear-reactions that many children evince toward their school experience.

3. *Personnel.* No one will deny that the maladjustments of pupils may be due in certain cases to the influence of poor teachers. We find in almost every school system a number of teachers who as persons are decidedly unwholesome in their influence upon the young children under their charge. These teachers have maladjustments in their own lives, and utilize the power their authority in the classroom gives them in ways that are injurious to the children. Fortunately the entire teaching personnel is not of this sort. Yet we find among teachers in general two outstanding weaknesses that make for classroom difficulty: (1) a lack of knowledge concerning the nature of the child and (2) a lack of teaching ability.

What evidence do we have that teachers generally have poor understanding of the real nature of their pupils? The teachers of Cleveland were asked to enumerate the behavior problems which their pupils presented. They were next asked to list these difficulties in the order of their seriousness. As the ten most serious problems in their opinion, the teachers listed: heterosexual activity, stealing, masturbation, obscene notes and talk, untruthfulness, truancy, impertinence, cruelty, cheating, and destroying school materials. These problems were then evaluated

according to their seriousness by a group of thirty experts actively engaged in the study and treatment of behavior disorders of children. The clinicians rated the following as most serious: unsociability, suspiciousness, depression, resentfulness, fearfulness, cruelty, easy discouragement, suggestibility, hyper-criticism of others, and undue sensitiveness.¹⁶ What the experts regarded as most serious a number of the teachers regarded as least serious! These teachers did not realize that they were concerned over symptoms of problems rather than over the underlying problems themselves. They failed to see that immorality, dishonesty, and transgressions against authority are often only outer expressions of fundamental recessive behavior tendencies. In a word, by their ratings not a few teachers revealed their lack of knowledge about the real nature of the child.

In addition to disclosing their lack of insight into child nature, these same teachers, quite unwittingly perhaps, betrayed their want of teaching ability. It will be recalled they complained that 59 per cent of their pupils were inattentive. What is this but a confession of inability to interest the children!

Zeleny reports a planned attempt to alter the behavior of problem pupils by improving the teacher-pupil relationship.¹⁷ The teachers in question were educated to a better understanding of their pupils' personalities. As a result, six out of nineteen problem situations were remedied. The maladjustments of children in school experience become fewer as teachers become more proficient in the fulfillment of their task.

V. Educational Readjustment

It must not be supposed that the schools of the present are not making a valiant effort to meet the challenges implied in the foregoing discussion. In fact the school has probably always been more sensitive than any other social institution to the changing needs of the social order. It is a far cry from the Pilgrim schoolhouse to the modern nursery school. But the Pilgrim school was

¹⁶Wickman, E. K., *Children's Behavior and Teachers' Attitudes*, Commonwealth Fund, Division of Publications, New York, 1928, pp. 124, 127.

¹⁷Zeleny, L. D., "Pupil-Teacher Relationships," *Sociology and Social Research*, 13:265, January, 1929.

itself an advance over what was before it. Even a very brief survey of the evolution of our present educational system will reveal this fact to us.

Backgrounds. School experience was at first the privilege of only a select few, and to this favored minority only a few cultural subjects were available. The idea of universal education was derived from the Protestant Reformation, which stressed the idea that the individual was responsible for his own salvation. If each person must see to his own salvation, it was necessary for him to know the Bible, and to know the Bible it was necessary for him to be able to read and write. Out of this necessity the public school arose. With time the curriculum was expanded to include a wider variety of cultural subjects, and then science was added. But for all the expansion of the study matter, the emphasis was still on *curriculum*.

Then came a realization that the child, not an arbitrary course of study, should be the center of the school. But children differ tremendously one from another. "Individual differences" became the keynote of a new program. Technical courses and technical schools developed for the technically-minded children; so, too, commercial training was provided. The nature of education was from this time forward to be determined by the child, his nature and his needs.

Present trends. What significant educational movements that affect children generally do we deservy in our own time? There are at least two worth noting: (1) education for all kinds of children and (2) education for the whole child.

1. *Education for all kinds of children.* Even after the specialized and diversified curriculum had been provided, the educational needs of all children were not satisfied. An undifferentiated manual training course, for example, does not meet the needs of all motor-minded children. Special provision must be made for individual differences even within such a sub-grouping. In realization of this fact, special classes were established on two bases: (a) the physical handicaps and (b) the mental status of children. In this discussion we need make mention only of the special work which is available at present to the blind, the deaf, the mute, and the deformed. Reorganization has taken place also on the basis of individual differences in the in-

telligence of children. One widely adopted plan consists of grouping the children into three classes: the dull, the average, and the bright. A program is evolved for each group suitable to the capacities of the children in it. Where this arrangement exists, the dull pupils are not disheartened by the swift intellectual pace of the bright pupils, and the bright pupils are not impeded in their progress by the slowness of the others. But even this threefold classification, commonly known as the "X-Y-Z" plan, is not entirely satisfactory. Though much is gained by separating the bright pupils from the rest, there is, further, sufficient difference between the best and the worst of the entire group to necessitate further differentiation. Accordingly a number of school systems have supplemented the "X-Y-Z" scheme with additional special classes at both extremes. They provide classes for the feeble-minded and special classes for the gifted. The feeble-minded children are given academic training up to the level of their capacity for it, and also manual and industrial training to equip them for service. Through the habits of regularity and application that these activities establish, it is aimed to build up personalities which if not socially adequate are at least socially dependable. The special work for gifted children seeks to realize to the utmost their unique talent. To this end, the work is made both stimulating and free. Their curriculum is greatly enriched. They do much independent reading. They pursue not assigned tasks but projects of their own choosing. So it is that, by increasing differentiation of its program, the school has sought to meet the needs of all kinds of children.

2. *Education for the whole child.* Our best educational thinking aims to provide schooling that is comprehensive for each child as well as extensive to all children. The traditional school is concerned largely with the development of the child's intellectual life. But there are other aspects of the life of a child fully as important as this one. The child's physical, emotional, and social development need attention as well. Consequently, the concern of the progressive school is with the total development of the child. He eats, sleeps, works, and plays—all at school. It is the desire of the "new school" that the child acquire proper habits in every realm of his experience.

Since the education of the whole child cannot possibly be begun too early, the nursery school accepts the child just so soon as he may with safety be separated from his mother.¹⁸ The tendency has been to press back the age at which a child may be admitted, until at present nursery schools take children from eighteen to twenty-four months and keep them until they are four or five years old. Thereafter the child may continue under the same educational policies at a progressive school.

VI. Subsequent Discussion

Soon or late in the course of his school experience every child comes face to face with the problem of how he will one day earn a livelihood. Occupational choice and occupational proficiency become matters of the first importance to him. It is therefore appropriate for us next to consider the topic of "The Child and His Work Experience."

READINGS

1. Betts, G. H., and Hill, G. E., "Current Practices in Character Education in the Public Schools," *School and Society*, 36:154, July 30, 1932.

(Of the cities heard from in this survey, what percentage have a time-allotment for character education? What do they provide?)

2. Dayton, N. W., "Mental Deficiency and other Factors that Influence School Attendance," *Mental Hygiene*, 12:794, October, 1928.

(What are the more important causes of school truancy? Is mental deficiency a special cause? Why?)

3. Emery, E., "The Child Factor in the Teacher-Pupil Relationship," *Mental Hygiene*, 10:285, April, 1926.

(What are the various defensive reactions against authority that children show in school? How may they be dealt with?)

¹⁸For an account of a nursery school plant, see Davis, M. B., and Heinig, C. M., "Housing and Equipping the Washington Child Research Center," *School Life*, 15:84, January, 1930; for discussion of nursery school practices, see Johnson, H. M., *Children in the Nursery School*, John Day, New York, 1928.

4. Glueck, B., *Some Extra-Curricular Problems of the Classroom*, Joint Committee on Methods of Preventing Delinquency, New York.
(Enlarges upon the thought that the teacher's chief business is "the child's personality." How is this view supported?)
5. Goddard, H. H., *School Training of Gifted Children*, World Book Co., Yonkers-on-Hudson, 1928.
(Read Chap. II. What impresses you most in this account of a visit to a special class for gifted children? Why? Is this new type of class superior to the old? Why?)
6. Hurwitz, R., "Another Aspect of Mental Hygiene in the Classroom," *Mental Hygiene*, 15:17, January, 1931.
(What are the "high lights" of this teacher's experience with an "adjustment class"? What impressed you most in it?)
7. Johnson, E. H., "School Maladjustment and Behavior," *Mental Hygiene*, 11:558, July, 1927.
(What did the writer's study of problem boys in a New York public school reveal? Are the findings important? Why?)
8. Johnson, H. M., *Children in the Nursery School*, John Day, New York, 1928.
(Read Part I. How are routine habits established in the young child? Outline the daily schedule of the nursery school.)
9. Line, W., "Mental Factors That Affect School Abilities," *Mental Hygiene*, 15:255, April, 1931.
(“Instead of the earlier question, ‘How may psychology be applied in order that more efficient learning may result?’ we now ask, ‘How may our school abilities best assist in fostering the mental health of the pupils?’” Explain this statement.)
10. McBee, M., "Family Attitudes Affecting School Behavior," *Family*, 11:13, March, 1930.
(Describe the family attitudes that make for undesirable school behavior. Are these attitudes the only factors involved?)
11. Morgan, J. J. B., *The Psychology of the Unadjusted School Child*, Macmillan, New York, 1931.
(Read Chap. IV. What different attitudes may children adopt toward their mental conflicts? Which are unwholesome? Why?)
12. Myers, G. C., "Schoolroom Hazards to the Mental Health of Children," *Mental Hygiene*, 12:18, January, 1928.
(In what way is "speed" injurious to the child? What is the value of "accuracy" as a study-goal? Why?)

13. Porter, M. P., *The Teacher in the New School*, World Book Co., Yonkers-on-Hudson, 1930.
(What are these new schools? How do they differ from the old? What are the distinguishing features of the "new teacher"?)
14. Pratt, C., *Experimental Practice in the City and Country School*, Dutton, New York, 1924.
(Read pp. 1-54. What does the writer mean by "adaptable materials"? How are such materials utilized? Do you approve of them? Why?)
15. Rugg, H. R., and Shumaker, A., *The Child-Centered School*, World Book Co., Yonkers-on-Hudson, 1928.
(Read Chap. V. What are the "articles of faith" of the new school? Do you prefer them above the old principles? Why?)
16. Schwesinger, G. C., "Why Children Fail at School," *Parents' Magazine*, 5:18, February, 1930.
(In what respects are children to blame for their school failures? Is the responsibility of the school sufficiently stressed?)
17. "The New Education Ten Years After," *New Republic*, June 4, 11, 18, 25, and July 2, 9, 1931.
(This is a symposium. Read any two articles and compare them. Do they make out a case for or against the new education?)
18. Washburne, C., *Adjusting the School to the Child*, World Book Co., Yonkers-on-Hudson, 1932.
(Read Chap. IV. How may instruction in reading be adjusted to the individual child? Are the suggestions practicable? Why?)
19. Woodworth, R. S., "The Nursery School and Child Development," *School and Society*, 29:497, April 20, 1929.
(In what ways may the nursery school supplement family care? What are the benefits to parents of the nursery school?)
20. Zachry, C. B., *Personality Adjustments of School Children*, Scribner's, New York, 1929.
(Read Chap. VII. What is the rôle of the school with respect to the integration of the child's personality? What parts do method, curriculum, and the teacher play in this process?)

CHAPTER XI

THE CHILD AND WORK EXPERIENCE

"The latest Gospel in this world is, Know thy work and do it,"

—THOMAS CARLYLE

I. Introduction

Let us briefly anticipate the matters that will engage our attention in this chapter. They cluster about two points. The first is the nature and importance of the activity which we designate *work*. The second is the proper adjustment of the child to his work experience. We shall allocate most of the chapter to the latter, giving heed to five elements involved in work adjustment: (1) work habits, (2) interests, (3) capacities, (4) training, and (5) opportunities. We shall see what part each one of these factors plays in the making of the child's work adjustment.

II. Nature and Significance of Work Experience

If we contrast work with play, we find at least three basic differences. Work involves the elements of (1) compulsion, (2) responsibility, and (3) regularity. First, the child plays because he wants to, but he works because he must. This is not to say that a child may not like to work, but rather that he does so in response to outer dictates. At play the child is his own master. At work he is subject to another's command. Work thus involves in some measure the adjustment of the child's wishes to the wishes of others or to the needs of life. Second, a child may play as he wishes, but he must give an accounting of his work. When he sets himself to the doing of certain tasks, he be-

comes answerable for the way in which he does them. His work is valued according to the results it yields. Work entails the assumption and discharge of responsibility. Third, a child may play when he chooses, but he must work according to schedule. Tasks must be done on time. There is a regularity to the occupational life which the play life lacks.

We see how work activity adds certain vital values to a child's experience. It emphasizes regard for outside control. It cultivates a sense of responsibility. It makes for punctuality and system. All of these values we wish for the child.

In addition, we covet for the child a happy orientation to a life-work. We can do much to assure a proper work adjustment for him by becoming acquainted with the matters which determine its nature. Irrespective of the kind of work that any child attempts, his adjustment to it will be affected by the attitudes which he holds toward work in general and by the work habits he exhibits. For any work and all work certain *work attitudes* and *habits* are indispensable. In addition to the possession of these essentials, the child to be happily placed needs also to be engaged in the right work. In fine, the child needs to be rightly adjusted to work in general as well as to an occupation in particular.

III. Work Attitudes and Habits

The child ought to be both willing and able to do work. Not a few children, however, are lacking at these two points. They show by their attitude that they are shirkers, not workers. They cannot succeed in any field of endeavor because they are unwilling to exert themselves. They feel no compulsion to complete the tasks assigned them. They work fitfully at their pursuits. Their methods show gross inefficiency. Such lacks conspire against the work adjustment of the children who have them.

A child will have the kind of work attitudes and habits which his experience engenders in him. The proper fashioning of these matters is entirely within the power of the home and the school. It is desirable for them to stress the dignity of labor. Even a very young child can be made to see that people who do not

produce anything are social parasites. Also, the child can early be given to understand that the assumption of work-responsibility is an attribute of increasing maturity. No child wishes to be thought forever a child.

Willingness to work should go hand in hand with actual work experience. A generation ago when the homestead was the prevailing economy, this statement would have been redundant. But with the increasing prevalence of the apartment-house home, this observation becomes pertinent. On the farm there are plenty of natural tasks for the child to do. What does the city apartment provide? Even the child's mother finds it difficult to find there sufficient work with which to occupy herself, if she is not gainfully employed outside the home. But even the apartment home can be made to yield work activities for the child. For the very young child very simple tasks suggest themselves, such as emptying the waste paper baskets, bringing in the morning paper, and supplying his father's slippers at dinner-time. The older child can help with cleaning and washing dishes. When the child begins his school experience, he can view this as his most important work, as indeed it is. Proper school habits are proper work habits. As a good worker rises in ample time for the start of his day's work, so the child who is a good school worker gets up with regularity and dispatch every school morning. As the good worker performs his duties according to schedule, so too the good student studies according to plan.

Parents who feel that some amount of manual labor ought to be included in their child's experience, and who are sensitive to the difficulty of providing it in the city, have resorted to living in the suburbs, even at inconvenience to themselves. Lillian Gilbreth¹ tells of one such unusual family. The father surveyed various towns within commuting distance from his place of business. He settled upon one which would enable him to spend considerable time with his wife and children. The entire family explored this community for a suitable home. They selected a house which had depreciated sadly through being unoccupied and neglected. But the house had splendid possibilities. It had only to be put in trim. A family council was held, the work

¹Gilbreth, L., *Living with Our Children*, Norton, New York, 1928, pp. 137 ff.

entailed by the new location was itemized, and the responsibility for various jobs was allocated. The renovation of the house and grounds became a family affair. The spirit and practices of the actual work-world were adopted, even to the point of "advertising" in the family for "bids" for certain odd jobs, like the removal of old tree stumps. These parents, in cultivating laudable work attitudes and habits in their children, were providing them with a solid foundation for their subsequent occupational experience.

IV. Work Interests

In addition to a generalized interest in work, children show interest in particular fields of endeavor. Certain activities are attractive to them, others are repugnant. A child will as a rule do best the work which he likes to do. Interest is the power that impels him to action. The less his work suits his fancy, the less will he be moved to do it, to say nothing of his doing it well. It follows that, wherever possible, the child should be encouraged to engage in work toward which his interests incline him.

Prevalence of work interests. While we stress on the one hand the importance of work interests, we are obliged on the other hand to acknowledge the widespread lack of such interests among children. In one study conducted at the high school level, it was found that more than 50 per cent of the students were uncertain as to what they wanted to do for a livelihood. After they have had some actual work experience, their interests become more clearly defined, but even so the number of children who remain confused is significantly high.² For those children who do not go to work but continue with their schooling, the situation is fully as bad. A collation of eighteen separate large-scale investigations in this field shows that about 20 per cent of the high school students who were questioned disclosed no definite occupational preference.³ When one out of every five children at the high school level does not know what he wishes

²Cohen, I. D., *Principles and Practices of Vocational Guidance*, Century, New York, 1929, pp. 24, 91.

³Koos, L. V., and Kefauver, G. N., *Guidance in Secondary Schools*, Macmillan, New York, 1932, p. 204.

to do with his work-life, the need for attention to this matter is clear.

Permanence of work interests. As a rule the child enters a succession of work interests before definitely committing himself to one. Such extensive modification of interests characterizes normal growth. The child's ambitions change as he has increasing opportunity to test out his talents and to appreciate the possibilities that exist in the work-a-day world. But a fairly decisive choice is often made by the time the child is of junior high-school age, that is, about twelve years old. One study shows that about three-fourths of all children leaving the junior high school move on with much the same occupational choices that they revealed at the time of their admission.⁴ This study suggests that work choices made rather early tend to persist. On the other hand, students who entered college without a work plan were found to have been also without a plan at the time they entered high school.⁵ These studies incline us toward the view that there is every advantage to be derived from an early settlement upon the field of work to which the child wishes to give his attention. As the period of preparation for a life-work becomes ever more prolonged in response to the demands of increasing specialization, it becomes more desirable for the child to know his mind early.

Utilization of work interests. Furthermore it goes almost without saying that a child's work interests should be capitalized in his choice of an occupation. But strangely we find that while many children are uncertain of their work interests, still others finally enter into employment which bears no positive relation to their work interests. In certain cases, this disregard for the child's real preference is chargeable to other persons who exercise influence over him. The child's parents are usually the culpable ones. Instances are not a few of parents who select their child's occupations for him. This they sometimes do openly and directly, but more often subtly, by means of hidden pressures which they bring to bear upon the child. This they may do even without

⁴Franklin, E. E., "The Permanence of Vocational Interests After Three Years," *School and Society*, 23:438, April 3, 1926.

⁵Crathorne, A. R., "Change of Mind Between High School and College," *Educational Administration and Supervision*, 6:274, May-June, 1920.

awareness on their part that they are doing it.⁶ But in a much greater number of cases the children themselves slight their own ambitions. In one study, 13,000 children of each sex between the ages of eight and one-half and eighteen and one-half were canvassed as to the motives which lay back of their vocational choices. These children ascribed their choices to the three following considerations, listed in order of importance: financial return, public esteem, and easy work.⁷ It is significant that *interest* in a given line of work for its own sake is not included among these reasons. Children tend to ignore their real work preferences for ulterior considerations.

Discovery of work interests. It has so far been suggested that children ought to have compelling work interests and that they ought to heed them. How can the children be helped to uncover their occupational preferences? There are three helpful guides: (1) their statements, (2) their actions, and (3) their performance on objective tests.

(1) The child's own statements concerning his vocational interests are generally reliable. After all, no one should know better than the child himself what he truly wants to do. If a child is asked to list his ambitions for himself, his fundamental interests are likely to appear. Even more valuable than direct statements are those which only indirectly reveal the child's inclinations. If the child is not aware of the nature of his disclosures, his statements are likely to be less studied and therefore more genuine. Hence a child's exposition of his day-dreams, for example, indirectly provides insight into his work interests.⁸

(2) A check upon the child's own analysis of his work interests can be had through noting his conduct. What he does betrays his inclinations even more than what he says he would like to do. His behavior in his spare time is especially revealing. What sort of activity takes the child's attention when he is free to do as he pleases? Some children when left to their own devices lose themselves at once in reading books. Their

⁶Young, K., "Parent-Child Relationship: Projection of Ambition," *The Family*, 8:67, May, 1927.

⁷Lehman, H. C., and Witty, P. A., "Some Factors Which Influence the Child's Choice of Occupation," *Elementary School Journal*, 31:285, December, 1930.

⁸See Henderson, L., "Ambitions and Daydreams of Children," *School and Society*, 21:95, January 24, 1925.

scholastic interest can readily be seen. Other children when free from duties seek the companionship of playmates. Their social interests are conspicuous. Still other children occupy their leisure time making, fixing, tinkering with things. Their mechanical bent is manifest.

(3) As a further aid in determination of the child's real work preferences, resort may be had to objective tests. Those now available are less reliable than we should like, but even so they are probably more reliable than unsupported personal opinion. If they are employed as additional aids in the determination of the child's interests, and not as the sole means of discovery, no harm can result from use of them. In any case they should be administered by experts. For young children there is available the *Lehman Vocational Attitude Test*.⁹ However, the need for appreciating the nature of the child's work tendencies in this precise way seldom arises before the junior high school age. A representative test at this level is the *Garretson-Symonds Interest Questionnaire*.¹⁰ For older children and adults, there is the *Strong Vocational Interest Blank*.¹¹

V. Work Capacities

The occupational success a child enjoys depends in part upon the interest he shows for his work. But his success depends even more upon the ability he displays along the line of his choice. The resources he brings to his work are material to his achievement. What he brings to his tasks in the way of equipment is a combination of native and acquired ability. He has certain natural suitability (or disability) for the work, plus a certain amount of efficiency due to training and experience. We shall in this section confine our attention to the native or inborn tendencies, generally known as *capacities*.

Relation of capacities to interests. We should expect to find a rather close positive connection between a child's inter-

⁹See Lehman, H. C., and Witty, P. A., "Some Factors Which Influence the Child's Choice of Occupation," *Elementary School Journal*, 31:285, December, 1930.

¹⁰Columbia Univ. Press, 1930.

¹¹Stanford Univ. Press, 1927.

ests and his capacities. It would seem that a child should like to do the things at which he is proficient, and that he should come to do them better for liking them. With one qualification this is the way the child behaves. But the qualification is as important as the general principle. Children like to do what they can do best provided this ability gives them cause for self-pride. What children want from their work activity is social status or social position. Each child will of course have his own conception of what occupations can give him prestige. As a rule positions involving some control over other people are thought to provide it.

We find that in their desire for prestige children not infrequently lose sight of their capacities. Their desires for themselves do not jibe with their talents. There ensues the common tragedy of a clash between interests and aptness. We may note in illustration the case of a boy who, after prolonged retardation, was finally graduated from high school through the good grace of his teachers. His I. Q. was only 89. When asked to tell what he wished to become, he wrote: "To be a successful man in business, commonly known as the 'Big Boss'—one who sits behind and pulls the strings." An obvious failure in high school work, he pictures for himself a career which will give him the sense of control which he covets.¹²

We have in the case of Sally a good illustration of the child's desire for an occupation that is socially esteemed. Although handicapped with an I. Q. of 60, she managed somehow to get through the elementary school. In her thinking she conceived of herself as being the "ugly duckling" of her family. This feeling was not mitigated by the fact that her sisters, although younger, were all brighter than she. It induced her finally to run away from home in search of the "place of her dreams." She was apprehended by the police, confined in a detention home, then paroled. The question arose as to what disposition ought to be made of her case. What work ought she to do? Obviously it ought to be based on her abilities. In view of her low general intelligence, she was put into a foster home at housework. Before long a new antisocial tendency appeared in her conduct: stealing. A study of the case at this point by the psychologist

¹²Goodenough, F. L., "The Diagnostic Significance of Children's Wishes," *Mental Hygiene*, 9:340, April, 1925.

at a child guidance clinic showed that Sally loathed housework. Her experience had forced the conviction that housework and inferiority were linked together. She had run away to escape from her sense of social inferiority and she was instead having it stimulated by her work.¹³

In the case of the boy above who wished to be a "Big Boss," we see the danger of an occupational choice which ignores the consideration of fitness for the work. And in Sally's case we see the menace of an occupational assignment which takes the matter of capacity into account but ignores the child's own occupational attitudes. Is there a way out of this dilemma?

It seems reasonable to conclude that occupational orientation must take its direction from the child's capacities, not his interests. If a choice has to be made, it is better that he should do what he is competent to do, even if he dislikes it, than that he should do what pleases him, even if he is incompetent at it. The happy adjustment is to have the child make his destiny his choice. If an honest facing of reality is encouraged in all matters during childhood, and a proper sense of values provided, the child should see the value to himself and to others of his making the most of the powers he possesses.

Interest-capacity maladjustment. It is estimated that about 50 per cent of all children are maladjusted in the matter of their vocational choices. Fryer tested 1,816 persons of different ages and levels of educational achievement as to their general intelligence. He then compared these scores with the intelligence required for success in the various occupations, ascertained from the I. Q.'s of those actually engaged successfully in the work. He found that about half of those tested possessed I. Q.'s requisite to their vocational choice.¹⁴

There are two kinds of interest-capacity maladjustment. (1) The child's ambition may overshoot his ability or (2) his ambition may lag behind his ability. That is, the work he chooses may prove too taxing or not taxing enough. Studies show that the number of children in the first category exceeds considerably the number in the second. Of one group examined, 48 per cent

¹³Tiebout, H. M., "Psychiatric Phases in Vocational Guidance," *Mental Hygiene*, 10:102, January, 1926.

¹⁴Fryer, D., "Predicting Abilities from Interests," *Journal of Applied Psychology*, 11:212, No. 3, 1927.

of the boys and 45.8 per cent of the girls had chosen occupations above their abilities, whereas only 8.8 per cent of the boys and 6.1 per cent of the girls had selected careers below their abilities.¹⁵ It is unfortunate that the lower the child's general intelligence, the greater the likelihood of his making a poor choice.

Capacity determination. Since it is important that the child's choice of occupation square with his capacities, it is necessary that his capacities be adequately appraised. By what means can we help to determine the nature of a child's work potentialities? In this endeavor, we derive assistance from at least these three sources: (1) the child's experience, (2) the estimates of the child's associates, and (3) objective tests of ability.

(1) *The child's work experience.* We can divine much about a child's capacities from his success or failure in his various endeavors. For example, a child's success at school is generally a reliable indication of his ability to work with concepts. Good grades in grammar school are predictive of good grades in high school; and a successful high school career is in turn predictive of a successful career in college.¹⁶ On the other hand, if a child does poorly in his studies in high school but very well in his extra-curricular activities, his chances for a successful business or social service career are greater than his chances for a promising academic profession. Past achievement is probably as reliable an indicator of future achievement as we possess at present.

(2) *Estimates of the child's associates.* The determination of a child's points of special strength and weakness can also be furthered by the judgments of persons who know him well. As a rule the opinion which a child's associates have of him is a fundamental factor determining the kind of vocational adjustment he will make. Since he is obliged to work among other people, their judgment of him will help or hamper him. Hence, even if it were most erroneous, their judgment would be worth having. A large number of institutions now use some sort of personal

¹⁵Feingold, G. A., "The Relation Between the Intelligence and Vocational Choices of High-School Pupils," *Journal of Applied Psychology*, 7:143, No. 2, 1923.

¹⁶Cf. Koos, L. V., and Kefauver, G. N., *Guidance in Secondary Schools*, Macmillan, New York, 1932, pp. 264 ff.

rating system in their selection of personnel. In social work especially these scales, which call for the rating by the person's associates of his various personality traits, have been widely utilized.¹⁷ There is no reason why estimates by the child's associates of other elements of his vocational equipment should not be useful also, when they are made carefully.

(3) *Measurement of capacity.* The serious endeavor to secure an accurate impression of the child's capacities by means of objective tests constitutes perhaps the most promising effort in the field of vocational guidance at the present time. Some tests have already been devised and validated, and the number is being steadily increased. We shall now consider certain representative tests in a number of occupational fields.

Scholastic aptitude tests. With nearly 100 standardized intelligence tests available at the present time, there is obviously no shortage of measuring devices in this field. These tests show the child's possibilities for academic education. They can be used also to suggest the child's capacity for callings other than school work, for the intelligence scores of persons now advantageously employed in a given occupation indicate the level of ability required for success in that field.

Mechanical aptitude. A child may be deficient in his ability to deal with concepts and yet be most efficient in his control over things. "Mechanical aptitude" describes capacity for grasping mechanical principles, commonly known as "machine sense." Representative of measuring devices in this field are the *Stenquist Assembling Tests of General Mechanical Ability*,¹⁸ the first to be developed, and the more comprehensive *Minnesota Mechanical Ability Tests*.¹⁹

Manual dexterity. Different from the ability to understand the relation between parts of machines is the capacity to manipulate objects. Children vary considerably in the speed and skill with which they can move their fingers, hands, and arms. Occupations calling for such skill come readily to mind, and they are as wide apart as typewriting

¹⁷See in illustration the *Personality Rating Scale*, American Council on Education (26 Jackson Place, Washington, D. C.); also the personality scale issued by the National Office, Y.M.C.A. The *Personal Rating Scale* (Y.M.C.A. Counseling Service, Los Angeles) is admirable.

¹⁸Board of Education, New York, 1921.

¹⁹Univ. of Minnesota Press, 1930.

and osteopathy. For determining degrees of manual adroitness Earle's *Measurement of Manual Dexterities*²⁰ has proved useful.

Commercial aptitude. Beginnings have been made in the direction of measuring ability for work in the business world. Disposition for clerical activity is shown by the *Thurstone Clerical Test*.²¹

Mathematical ability. The faculty for dealing with mathematical symbols is requisite to success in certain technical pursuits, but helpful in other fields as well. Two tests available for estimating mathematical facility are the *Orleans Algebra Test* and the *Orleans Geometry Prognosis Test*.²²

Scientific ability. The precise sciences, with their emphasis upon exact method, require a certain kind of mentality of those who would engage successfully in them. Children differ considerably in this kind of capacity. The *Stanford Scientific Aptitude Test*²³ provides a means for detecting and grading this kind of ability.

Musical ability. Science confirms our every-day judgment that children differ appreciably in native ability to produce musical effects. The nature and degree of a child's musical aptness is accurately determinable through the use of the *Seashore Musical Aptitude Test*.²⁴

Artistic Ability. Although there has not yet been developed as revealing an instrument for the detection of artistic ability as for the discovery of musical prowess, there do however exist certain tests which are of help in the objective determination of aptitude in art. Reference may here be made to the *Lewerenz Tests in Fundamental Abilities of Visual Art*²⁵ and the *Meier-Seashore Art Judgment Test*.²⁶

The proper application of these tests depends upon a proper appreciation of their value. If a child does well in a given test, let us say of arithmetic, he shows that he has one of the ele-

²⁰National Institute of Industrial Psychology, London, 1930.

²¹World Book Company, 1922.

²²World Book Company.

²³Stanford Univ. Press, 1929.

²⁴Columbia Phonograph Company, Educational Department, New York, 1919.

²⁵Southern California School Book Depository, Los Angeles.

²⁶Univ. of Iowa Press, 1929.

ments necessary to success in work calling for the use of arithmetic. The more able he is in this field as indicated by the tests, the more likely is he to succeed. So much for the value of the test on the positive side. Its negative significance is still greater. If a child does poorly on the test (and his performance is checked to assure its being an accurate disclosure of his powers), his chances for success in work calling for arithmetic are very poor indeed. In a word if a child does well on a test, he shows he has one ability requisite to success in that field, but he may fail of success in it for want of other requirements, such as proper work habits or desirable personality traits. But if a child fails in a test, he shows he is lacking in the ability for which that work calls. Other positive attributes which the child possesses may cause him to make the most of his limited ability but they can never supply the capacity which he lacks.

VI. Work Training

The positive relation of training to vocational success is generally conceded, even though there is no agreement as to the relative contribution to success made by the two factors of capacity and application. Many persons believe that inborn ability counts for more than education and industry combined. Others would support Edison who declared that genius is "one-tenth inspiration and nine-tenths perspiration." The discussion as to which of these factors, aptitude or training, is the more important, is not pertinent here. It is sufficient for our present concern to acknowledge the importance of both elements. In the studio of a young and promising music teacher, there is to be found an interesting document. It consists of a series of graphs showing in red ink his record on a test of in-born musical ability taken when he entered the University of Rochester School of Music as a freshman. Superimposed upon these ratings are others shown in black ink, representing his record on the same tests taken again four years later at the time of his graduation from the University. It is noteworthy that the two sets of ratings are practically identical. But this is what we expect. His *native* ability for music must ever

remain the same. But what of his playing? No one who heard him four years ago would recognize his playing today. It has improved immeasurably, as the result of training.

Though the call for preparation is as clear as a trumpet-tone, the host of children who do not heed it is legion. Child labor investigations uniformly show that large numbers of children leave school for work as soon as the law allows. They have not yet had time or opportunity for the cultivation of their capacities. We are not surprised to find more than two-thirds of these children in occupations requiring no skill. Nor do we wonder that on the average they pass through three jobs in the first two years out of school.²⁷

The pity of this condition is greater because in countless cases it could so easily have been avoided, had the guardians of these children accurately judged the capacities of the children under their charge and brought them into touch with agencies available to train them. We must not ignore the numerous situations where children withdraw from school without a work skill under compulsion of dire poverty. Nor should we overlook the failure of most public school systems to provide variegated occupational training. But even apart from these two lamentable situations, there are numerous children who leave school without a vocational skill simply through ignorance of the price they will pay for their lack. It is to be desired that the present vocational curriculum of the better public school systems, including as it does commercial training (e.g., typewriting, stenography, bookkeeping, office machine management), trade and industrial training (e.g., cabinet making, joinery, forge, machine shop, printing), training for domestic and personal service (e.g., cooking, sewing, home management, child care), and training for the professions (teaching, medicine, law) may be made even more inclusive, and a part of the offering of every school system.

VII. Work Opportunities

There is little point to fathoming a child's natural resources, to stimulating his interest in his best potentialities, and

²⁷Cohen, I. D., *Principles and Practices of Vocational Guidance*, Century, 1929, pp. 89 ff.

to preparing him thoroughly for his calling, if, when he is ready to show his power, no opportunity for him to do so exists in the work-a-day world. It is thus of first importance in the vocational preparation of the child to take account of the places which are open to him. No intelligent direction can be given to the child's work destiny without clear knowledge of the occupational needs and opportunities of our society.

The work interests which most children manifest at present definitely show that they have no adequate knowledge of existing work opportunities. They disclose work choices that are narrow and shallow. When asked to name their ambitions, children list activities in only a few traditional fields. Girls are quite likely to hope for eventual employment as secretaries, stenographers, or teachers. Boys are inclined toward the trades and manufacturing and mechanical pursuits.²⁸ Children thus reveal familiarity with only a limited number of fields of activity, and these among the most traditional. In addition, they display only the shallowest familiarity within these traditional fields of endeavor. They are acquainted with only the general nature of them. And, as we would expect, this lack on their part of unique occupational interests means over-crowding in the fields of their choice.

There are too many children who wish to prepare for the same sort of work. To make the situation worse confounded, the fields they plan to enter are already badly congested. We need cite here only one bit of clear evidence on this grievous condition. The city of Joliet, Illinois, has issued a bulletin to the public-school children of that community showing the results of a survey on the relation of their ambitions to work opportunities in Joliet. The study shows conclusively that the number of children planning to enter certain occupations far exceeds the requirements of these occupations. Although only 4.5 per cent of the male and 13.6 per cent of the female population of the city was engaged in the professions at the time of this study, 40 per cent of the boys and 47 per cent of the girls in the public high

²⁸Henderson, L., "Ambitions and Daydreams of Children," *School and Society*, 21:95, January 24, 1925.

schools expressed their intention to prepare for professional work.²⁹

At the same time that so many children are acquainted superficially with a narrow range of work, they are of course ignorant of occupational prospects which afford real opportunity for those who can qualify. There is manifest need for children to become familiar with the wide sweep of vocational possibilities. The horizon is by no means so narrow as their selections would suggest. The 1930 United States Census listed well over 9,000 important occupations. It is the business of those who have charge of the child's education to acquaint him with the existence of this vast area of choice. Fortunately, literature is now available describing the nature, requirements, and rewards of a host of occupations. The White House Conference on Child Health and Protection has recently made available a bibliography of occupational pamphlets. They cover such divergent fields as anthropology, criminology, dramatics, foreign service, hotel management, and sample mounting.³⁰ The perusal of such material may conceivably serve to arouse occupational interests in children whose ambitions have hitherto lain dormant. Such material can surely serve both to clarify the occupational thinking of children who have already determined upon a life work and to give their ambitions drive and direction.

VIII. Subsequent Discussion

It is proper for us to give serious thought to matters involved in converting the economically dependent child into the efficient, contented breadwinner. But we know that neither man nor child lives by bread alone. Clearly we covet besides for every child a life complete with beauty. On this account it is fitting for us to consider in the next chapter the general theme of the child and his æsthetic experience.

²⁹*Joliet Township High School Bulletin*, Joliet, Illinois, 9:2-3, December, 1928, referred to by Koos, L. V., and Kefauver, G. N., *Guidance in Secondary Schools*, Macmillan, New York, 1932.

³⁰*Vocational Guidance*, Century, New York, 1932, pp. 107-136. See also Woodhouse, C. G., ed., *Occupations for College Women*, Institute of Women's Professional Relations, 1929 (supplemented 1930, 1931).

THE CHILD

READINGS

1. Albery, H. B., "Vocational Interests of Children," *Industrial Arts Magazine*, 12:255, July, 1923.
(What are the major work interests of children? Do you think they are the same for children everywhere? What determines their nature?)
2. Bridges, K. M. B., "Occupational Interests of Three-Year-Old Children," *Pedagogical Seminary*, 34:415, September, 1927.
(How are the interests of little children determined? Does your judgment as to their nature conform to the writer's? Why?)
3. Cabot, R., *What Men Live By*, Houghton Mifflin, Boston, 1914.
(The first section is devoted to "work." What view of work does the writer take? With what facts does he support his view?)
4. "Children and the Use of Money," *Child Study*, 9: No. 9, May, 1932.
(A symposium. Read any two articles and contrast their viewpoints. Which makes the greater contribution to your thinking? Why?)
5. Cloonan, M., "Occupational Opportunities and Guidance for Girls in Rochester," *Journal of Home Economics*, 23:267, July, 1931.
(How were the opportunities of this community determined? What guidance for girls does it supply? How, in your judgment, can the matter of the changing needs of a community be taken into account?)
6. Coxe, W. W., "Reliability of Vocational Choices of High School Students," *School and Society*, 32:816, December 13, 1930.
(What method was used in determining reliability? Do you think it is adequate? Why? How reliable are work choices on this level?)
7. Crawford, A. B., and Clement, S. H., ed., *The Choice of an Occupation*, Yale University Press, New Haven, 2nd ed., 1932.
(This is a substantial book. Read any section that appeals to you. Indicate what contribution to your knowledge and thought it makes.)

8. Davis, J. J., "Teach Your Child a Trade," *Outlook*, 131:601, August 9, 1932.
(Why does the writer emphasize preparation for a *trade*? Tell why you agree or disagree with him.)
9. Davis, F. G. and B. C., *Guidance for Youth*, Ginn, Boston, 1928.
(This book presents information about a number of occupational fields. Read about the work that most appeals to you. What new light does the discussion throw upon your knowledge of the field?)
10. Douglas, A. A., "Vocational Interests of High School Seniors," *School and Society*, 16:79, July 15, 1922.
(What work interests predominated? How do you account for them? Do you think a study made today under the same circumstances would give the same results? Justify your belief.)
11. "Fitting Jobs to Mental Capacity," *Monthly Labor Review*, 34:599, March, 1932.
(What can society do about adjusting work to the mental capacity of its members? What are the advantages of allowing children to choose their own vocations? The disadvantages?)
12. Gilbreth, L., *Living with Our Children*, Norton, New York, 1928.
(Read pp. 137 ff. What advantages can you see in the kind of work program outlined? What disadvantages? Toward which side do you lean?)
13. Halle, R., "Preparing for a Job," *Parents' Magazine*, 6:28, May, 1931.
(What useful suggestions do you find in this article?)
14. Henderson, L., "Ambitions and Daydreams of Children," *School and Society*, 21:95, January 24, 1925.
(What do children's daydreams have to do with their vocational preferences? Are "daydreams" different in this regard from ordinary "wishes"? What leads you to think so?)
15. Johnson, H., and others, "Training for Responsibility," *Child Study*, January, 1928. Also in pamphlet form, Child Study Association of America, New York.
(What are the values of establishing "routine habits" in the young child with reference to work? How may responsibilities be "graded"?)

16. Koos, L. V., and Kefauver, G. N., *Guidance in Secondary Schools*, Macmillan, New York, 1932.

(Read Chaps. X and XI, pp. 280 ff. How do personality factors influence vocational adjustment? How may personality be estimated?)

17. Lehman, H. A., and Witty, P. A., "Study of Vocational Attitudes in Relation to Pubescence," *American Journal of Psychology*, 43:93, January, 1931.

(What elements of adolescence help to shape vocational attitudes? Which attitudes at adolescence are likely to endure?)

18. Proctor, H. M., and Wood, H., "Relation of General Intelligence to the Persistence of Educational and Vocational Plans of High School Pupils," *Journal of Educational Research*, 7:277, April, 1923.

(What are the general conclusions of this study? Do you think there is any value in the persistence of a work ambition? Why?)

19. Rigby, M., "Case Study from the Vocational Guidance Clinic," *Psychological Clinic*, 18:205, November, 1929.

(Describe the procedure of the clinic. What contribution do you think such a clinic has to offer?)

20. Ross, M., "New Careers for Daughters," *Parents' Magazine*, 6:14, November, 1931.

(From which occupations are women still excluded? Justly?)

NOTE: There is a considerable collection of books available on the general theme of vocational guidance. The bibliography above is given over almost entirely to periodical literature in the specialized field of "the child and his work experience," but the interested student should familiarize himself with the general material as well.

CHAPTER XII

THE CHILD AND ÆSTHETIC EXPERIENCE

"I have two loaves of bread; I shall sell one and buy a hyacinth
to feed my Soul." —HINDU SAYING

I. Introduction

In this chapter we shall have a four-fold concern about the child and his æsthetic experience. First, we shall endeavor to appreciate the significance of beauty for the life of the child. What, after all, is an æsthetic experience, and what are the benefits of it? Second, we shall survey the æsthetic interests that children show from the outset of their lives. What that is beautiful intrigues them? Third, we shall estimate the æsthetic capacity of children. In what directions, and to what degrees, are children naturally inclined toward æsthetic experience? Fourth and last, what may we do to realize the capacities and foster the interests that children evince for the beautiful? We shall bring our discussion to a close with attention to this matter of the æsthetic cultivation of children.

II. Significance of Æsthetic Experience

Nature of æsthetic experience. Although we find disagreement among psychologists as to the precise nature of beauty, no person when he enjoys an æsthetic experience is ever in doubt of it. Indeed, the very thing that confounds the analyst makes the beautiful experience so vivid and real to the person who undergoes it, namely, its subjective nature. Beauty is in essence a matter of *feeling*. We may say that æsthetic experience

exists whenever we feel ourselves to be in conscious harmony with a situation we regard as beautiful.

There are two aspects of this view of beauty which warrant notice. First, æsthetic experience is a conscious affair. If an experience is to have æsthetic value for one, he must himself be immediately aware of the fact. Second, a subjective interpretation of beauty means that æsthetic experience is highly individualized. That is beautiful which we think to be so. Smoke and soot, for example, do not ordinarily conduce to poetic rapture; yet Carl Sandburg sings their praise. We come to the view that "beauty means primarily what seems beautiful to us."¹ No objects or situations have exclusive power to excite the sense of beauty. Walt Whitman could find loveliness in the most common things and places. Indeed, in this view all of life would appear to be beautiful to us if we could happily adjust ourselves to all of its aspects.²

Forms of æsthetic experience. However subjective and individualized æsthetic experience may be, there are nevertheless certain kinds of situations which more than others elicit æsthetic response from us. We are all constituted so much alike that the appeal of certain situations is fairly universal. These situations are such as involve: rhythm, form, color, lines, design, symmetry, balance, sound, and movement. Rhythmic sound moves us more agreeably than sound which is haphazard. Designs embodying symmetry take our fancy as arrangements devoid of this element do not. Investigation has shown that in the forms we think most beautiful, the width measures about 62 per cent of the height.³ Objects bearing certain proportions are more satisfying to our taste than those which lack such balance. Thus we see that certain elements in our experience contain peculiar power to stimulate in us the sense of beauty.

These "carriers of beauty" assume in our experience two primary manifestations, which we may designate respectively as *informal* and *formal*. Informally, such elements as color, rhythm,

¹Dimmet, E., *What We Live By*, Simon and Schuster, New York, 1932, p. 83.

²Cf. Langfeld, H. S., *The Æsthetic Attitude*, Harcourt, Brace, New York, 1920, p. 278.

³Gault, R. E., and Howard, D. T., *Outline of General Psychology*, Longmans, Green, New York, 1925, p. 201.

and movement pervade much of our everyday life. They appear conspicuously in the natural world. There is "the golden lightning of the setting sun," "the music of the spheres," "the endless surging of the tide." When these same elements come under the creative influence of the brain and body of man, they emerge as the arts. Rhythm and sound are at the heart of *poetry* and *music*. Color is the life-blood of *painting*. Form is the essence of *sculpture* and *architecture*. The *dance* is the embodiment of the appeal of motion. And into *drama* are poured the elements of all the arts. Here, then, is the æsthetic offering from which the child is free to choose: on the one hand, the seven formal arts and their many derivatives; and on the other hand, the whole wide world in which the forms of beauty abound.

It is to be regretted that the child's possibilities for æsthetic experience are so commonly identified with the formalized arts. The opportunities of the informal category are slighted, if indeed they are recognized at all. There is great need that beauty be recognized wherever it appears. In the cultivation of the child's sense of the sublime, emphasis should be placed upon both the formal and the informal manifestations of beauty.⁴ Havelock Ellis' book, *The Dance of Life*, carries even in its title the suggestive thought that life itself is essentially rhythmic, and hence a thing of beauty. Although limitations of space will compel us in this chapter to give major attention to the child's æsthetic experience in relation to the formal arts, we shall bear in mind constantly the real possibilities for æsthetic satisfaction in his everyday experience.

Values of æsthetic experience. There is great disparity between our verbal acknowledgment of the importance of beauty and our actual neglect of its claims. Though the value of beauty is admitted, beauty itself is not embraced. There is ample evidence as to this opposition of word and deed in both the activity and the literature of the school. Since the beginning of our public school system, and continuing up to the present time, the main school emphasis has been placed upon the intellectual, not the æsthetic aspects of the child's personality. Learning, not feeling, has been the prime activity fostered. So

⁴For beauty in ordinary experience, see Goldstein, H. and V., *Art in Everyday Life*, Macmillan, New York, 1927.

it is that, whereas we have innumerable schools built up around activity in "reading, writing, and arithmetic," we have only a very few schools whose activity centers about music or painting or dancing, and not even a single school of prominence whose nucleus is the drama.⁵ The neglect of the arts continues into our colleges. It is strangely true that a student can be graduated from most of our colleges of liberal arts without having studied any art. This meager emphasis upon art in the schools is further reflected by the present literature on the school. The writings on art in relation to education are so few as to be counted with ease. As against the almost 100 recognized tests of general intelligence, the standardized tests of capacity for art can be counted on the fingers of both hands.

This unseemly neglect of the claims of æsthetic experience justifies attention to them. What are the returns yielded by an investment in æsthetic experience? Here we shall make mention of only two values, *relaxation* and *enrichment*. They are by no means the only two that are forthcoming; but if there were no others these two would be ample justification for æsthetic experience.

We are told that "music hath charms to sooth the savage breast." The relaxing power of æsthetic experience could hardly be better put. Lately we have seen that music is soothing not only to the savage but to the sick as well.⁶ In many hospitals for mental patients, group singing is part of the daily routine. After their musical hour, the patients are much more tractable than they were before. If music has the power to relax these persons with abnormal tensions, can it not do at least as much for those who are normal in this respect? With the increasing movement of people to the city, where speed and noise and congestion tax the nervous system, the need for an instrument of relaxation becomes fairly imperative. On the ground of its easing quality, æsthetic activity deserves a commanding place in the experience of every child.

⁵See Rugg, H., and Shumaker, A., *The Child-Centered School*, World Book Company, Yonkers-on-Hudson, 1928, Chap. II: "Introducing the Arts," p. 142.

⁶Cf. Diserens, C. M., *The Influence of Music on Behavior*, Princeton Univ. Press, 1926.

Even for such as presumably have no need to loosen taut nervous systems, æsthetic experience is a boon. It serves to enrich and glorify what would otherwise be mere animal existence. Beauty is thus a sort of plus sign; it always adds significance to the situations to which it is attached. Who will not grant that richer than the experience of the child who sees in the clouds overhead nothing to excite his imagination is the experience of him who finds in them "castles in Spain." The child who on occasion says to himself, "This is beautiful," converts mere perception into experiences of color and depth.

III. Æsthetic Interests of Children

Absence of æsthetic interest in infancy. Children in infancy are strangers to æsthetic experience. Beauty has as yet no meaning for them. For one thing they are still incapable of the kind of critical evaluation which is essential to an appreciation of the lovely. Their experience is not ample enough to permit of comparison. Furthermore, their adjustment to life is still far too imperfect to admit of their being conscious of its sublimity. They are preoccupied with the process of working out an adequate adjustment. They will know the meaning of the beautiful when they have achieved some sort of conscious harmony between themselves and the conditions of their environment.

Meantime the interest of infants revolves about sheer self-expression. Very young children utilize sound, but they employ it to amuse themselves and to get attention. Their use of it is experimental, not æsthetic. No infant attempts to cry æsthetically. Even when he is somewhat older, say about two years of age, the child remains unaware of the æsthetic possibilities of his vocalizing. One teacher in a progressive nursery school tells of jotting down the spontaneous musical utterances of little children and then reproducing these creations later in the presence of the composers. She reports that the little child shows no recognition of his own creations.⁷ In their use of color, little children re-

⁷Smith, L. W., "Spontaneous Music of Children," *Creative Work and Play*, Broad Oaks School, Pasadena.

veal the same non-æsthetic interest. They handle their crayons carelessly, as objects to be manipulated mechanically. Æsthetically they do not distinguish a Jumbo crayon from a hammer. They use the former as readily as the latter for banging and pounding.⁸ Even when they are able to draw, they do not concern themselves with making "pretty" figures. Drawing is for them simply a means of self-expression, the "graphic language" of childhood.⁹

Presence of æsthetic elements. For all his lack of regard for beauty, the very young child nevertheless shows deep interest in the *constituents* of beauty. He evinces from birth a disposition favorable to the elements of which beauty is fashioned. For example, rhythmic sound is the stuff of which music is made. And, though he has no appreciation of the grace involved in such sound, the little child shows a marked liking for it. His response to the rattle antedates in point of time his response to other sound.¹⁰ May not this well be because of the more rhythmic quality of the rattle? Color is likewise an æsthetic element early favored by the child. In one expert opinion no young child likes to work in any medium but color.¹¹ Again, what color is to painting, movement is to the dance and to dramatics. And such children as do not like to act from a very tender age constitute indeed a very small minority. Most children revel in such games as "store" and "house" where they assume the rôle of adults. So it is that very young children show an interest in the elements of which beauty is composed. If stimulated, these elements will form the basis of their later æsthetic interests. As Yeomans has so well observed, the fact that so many children show no compelling æsthetic interest when they grow up is due to the failure of their society to stimulate the interests inchoately present from the start.¹²

Order of preference. What is the relative appeal which these æsthetic elements have for the very young child? Sound

⁸Johnson, H., *Children in the Nursery School*, John Day, New York, 1928, pp. 220-230.

⁹Goodenough, F., "Children's Drawings," in *Handbook of Child Psychology*, Edited by Carl Murchison, Clark Univ. Press, 1931, p. 480.

¹⁰Cf. p. 125.

¹¹De Nancrede, E., "Creative Possibilities of Art for Children," *The Child's Emotions*, Univ. of Chicago Press, 1930, p. 306.

¹²Yeomans, E., *Shackled Youth*, Little, Brown, 1928, Sec. I.

and motion are the first to elicit response from the infant, and in strength of appeal they are about equal. We have the customary union of the music of the lullaby and the rocking of the cradle. Next the child responds, but in less degree, to the element of color. McDougall, experimenting with his own children, received from them a reaction to red as early as the fifth month.¹³ Wooley likewise found the infant's preference for red.¹⁴ At a later age comes response to form and design. In one study, small children who were assigned the task of matching geometrical figures, matched them on the basis of likeness of color. It is not until they reach the age of six or seven years that children generally give primary consideration to the matter of form.¹⁵

Characteristics of the pre-æsthetic experience. So far we have said that children engage in activity involving the elements of æsthetics without being conscious of art. Now we may ask: when children engage in such activity, what are its features? We recognize four characteristics of this pre-æsthetic experience: it is (1) schematic, (2) repetitive, (3) intimate, and (4) fanciful.

The schematic nature of the child's creations is noteworthy. All his efforts are extremely simple. But his simple expressions and constructions are intended to represent much that is not obvious. In the drawings of little children the symbolic feature is especially conspicuous. They indicate the whole scheme of a thing by a few simple lines. A row of buttons down the middle of a figure is all the clothing with which a child may supply it. The child has the idea of dress but lets the buttons represent the whole attire. So, too, in his songs the little child embodies his entire conception in a very few notes; and again in his dramatic play, he covers a great deal of action in a very few movements.

Repetition is conspicuous in the child's creations. In his songs, a single *motif* appears again and again. In his drawings, he will reproduce a certain object, or feature of an object, repeatedly. Goodenough tells of one child who started to draw the

¹³McDougall, W., "An Investigation Concerning the Color Sense of Two Children," *British Journal of Psychology*, 2:338, 1906-1908.

¹⁴Wooley, H. T., "Some Experiments on the Color Perception of an Infant," *Psychological Review*, 16:363, 1909.

¹⁵Cook, W. M., *Ability of Children in Color Discrimination*, Williams and Wilkins, Baltimore, 1931, p. 306.

human form, got as far as the abdomen, then continued to draw a chain of circles reaching to the bottom of the page. In the young child's poetry the same reiteration appears, as consultation of any of the anthologies of children's verses mentioned on page 252 will show. Recurrences of a single episode characterize dramatic play also. A three-year-old boy, while taking his bath, began to churn up the water in his tub with the movement of his hand, at the same time calling out dramatically: "It's a storm! It's a storm!" This episode he continued for some time, with much gusto.

The subjects of children's creations are intimate ones. They sing songs of such commonplace things as soap, blankets, and stones. They indite poems about things most familiar to them in their experience. Their dramatic creations revolve about situations they know. When allowed to draw without compulsion, they sketch familiar objects and show a decided predilection for the human form.

Children's productions are oftentimes fanciful. Although the subjects of which they write and sing are familiar to them through everyday contact, they frequently endow these subjects with unreal qualities. In their poetry, for example, children may attribute feeling to inanimate objects such as trees and stones. This has caused one writer to remark upon the essential identity of poets and children in their faculty for make-believe.¹⁰

IV. *Æsthetic Capacities of Children*

Importance of estimating æsthetic capacity. As in all his other experience, so too in his æsthetic life, it is desirable that the child's expectations and efforts be commensurate with his capacities. Otherwise one of two kinds of tragedy may occur. Either the child's æsthetic interests and endeavors may exceed his ability, or they may definitely lag behind it. Only disappointment can come to the child from trying to create beauty in an art for which he does not have the natural resources. As one music critic has remarked: "... many a fairly good player

¹⁰Bartlett, E. F., "Poems Before Seven," *Bookman*, 61:661, August, 1925.

has been spoiled by the effort to become a very good one."¹⁷ This does not mean that the child should not aim high but only that he should not attempt the impossible.

Although the tragedy is more obvious where the child's æsthetic ambition outruns his talent, the loss to the child and to society is greater where æsthetic endeavor lags markedly behind ability. Lately we have been uncovering extraordinary creative talent among under-privileged city children, as the result of the enterprise of certain philanthropic foundations devoted to the discovery of gifted children. A number of peculiarly talented artist children have been identified in this way. But even more important, from a social standpoint, is the considerable amount of more than commonplace capacity for various kinds of art found in the population generally. Except for the systematic search of these agencies certainly at least a few of these children showing real genius would have been "born to blush unseem, and waste their fragrance on the desert air."

Kinds of capacity. We commonly recognize two sorts of æsthetic capacity, that for the *appreciation* of beauty and that for its *production*. Each of these makes its own special demands upon natural ability. That the demands of appreciation are lighter is quite apparent. Most children can appreciate beauty better than they can produce it. It is much easier to *know* and to *feel* than to *do*. Again, most children can appreciate beauty more generally, that is, in more fields, than they can produce it.

The capacity for the creation of beauty is highly specialized, whereas the capacity for the appreciation of beauty is a function of general intelligence. So closely is the ability to appreciate beauty related to intelligence that the intelligence tests themselves include items which call for the manifestation of this ability. For example, the Stanford Test sets up as a measure of normal mentality at the four-year level tests involving the comparison of lines, the discrimination of forms, and the copying of a square. At higher levels also there are included tests of æsthetic discrimination.¹⁸

¹⁷Kent, W. P., "Can a Musician Be Made to Order?" *Child Study*, 9:107, December, 1931. Reprinted by permission of Child Study Association of America.

¹⁸Termin, L., *Measurement of Intelligence*, Houghton Mifflin, Boston, 1916, Chap. 9, p. 142.

No such positive connection exists between general mentality and æsthetic creativeness. Creative capacity for music or representative drawing is "slightly if at all related to intellectual ability."¹⁹ The same conclusion probably holds for the other arts as well, although music and drawing are the only two which have been sufficiently studied to warrant such a finding.

For all the distinctions that can be drawn between the ability to appreciate art and the ability to produce it, the two capacities are by no means entirely separate. Writing of the artist, Langfeld states: "It is necessary for him to appreciate before he can produce."²⁰ Conversely, John Dewey suggests that true appreciation results only from experience which takes one right into the heart of the situation to be appreciated. As a rule, this can be achieved only by sharing the experience, that is, by doing something about it.²¹ There can be little doubt that performance renders appreciation more complete. Any measure of creative experience, no matter how little, is of value first for itself and second for its strengthening of the child's appreciative sense.

Nature of æsthetic capacity. What is the nature of artistic talent? First, as a rule it is *specialized*. If a child shows artistic skill at all, it is likely to be confined to a single field of expression. Versatile men like Michael Angelo and Leonardo da Vinci are extremely rare. Second, ability within even a single field of art may be *particularized*. Let us use musical capacity to illustrate our meaning. Formerly, one child was called "musical," another "unmusical," as if capacity for music were one undifferentiated thing. Present thinking has it, however, that musical talent is a composite of five elements: musical sensitivity, action, memory, intellect, and feeling. In turn the first of these, musical sensitivity, is itself a composite of five elements: pitch, intensity, time, consonance, and rhythm.²² It appears that a child may have considerable capacity for one or more of these and not for the others.

¹⁹Hollingworth, L. S., *Gifted Children: Their Nature and Nurture*, Macmillan, 1927, p. 202.

²⁰*Æsthetic Attitude*, Harcourt, Brace, New York, 1920, preface.

²¹Dewey, J., *Democracy and Education*, Macmillan, New York, 1916, Chap. XI.

²²Gl. Seashore, C., *The Psychology of Musical Talent*, Silver Burdett, New York, 1919.

Although no one of the other arts has been studied as carefully as music, preliminary studies in the nature of capacity for representative drawing suggest that it resembles that for music in its composite character. That is, drawing probably involves a number of separate skills, which may appear in children with unequal degree of excellence. What is now known to be true of music ability and what is now believed concerning talent for drawing, is probably true as well of capacity for the other arts.

Prevalence of æsthetic capacity. How common is aptness for æsthetic production? One statement has it that "all God's chillun got wings." This estimate is not far from the truth, for there are indeed few who are not equipped to take æsthetic flight. All children of normal mentality and even many of inferior mentality are capable of some degree of æsthetic appreciation and expression. In fact, æsthetic activity occurs earlier in the child's life than is generally realized. When he is only one month old, the average child listens to sounds. At two months of age he hearkens to the speaking voice. At three months he may be quieted by the human voice or by music. At four months he himself imitates vocalizations and perpetuates them for the sheer enjoyment he derives from them. At five months he plays vigorously with a rattle.²³ When he is old enough for the nursery school, he will give utterance spontaneously to rhythmic speech. Those who listen unobtrusively to the little child in the nursery school find that he makes up stories which he tells in his play, with a cadence of speech that approaches the poetic.²⁴

It is safe to say that as a rule the æsthetic capacities of children exceed their æsthetic interests. We know this through the works that children produce when their artistic impulses are stimulated. Products are after all the best indications of capacity. The number of collections of children's art of various kinds is considerable. We need here mention only a few. There are available, in a single source, scores of miniature reproductions of the art creations of elementary and junior high school

²³For an inventory of the child's capacities, see Gesell, A., *Infancy and Human Growth*, Macmillan, New York, 1929, pp. 126 ff.

²⁴Baruch, D., "Creative Language," *Creative Work and Play*, Broad-oaks School, Pasadena, California.

children.²⁵ Also there have been gathered together various original stories of four-year-old children, taken down from dictation by their teachers.²⁶ Of anthologies of children's poetry there is no want. An excellent one is Mabel Mountsier's *Singing Youth*.²⁷ To be sure, the great majority of publications on the art creations of children are given over to the products of the exceptionally gifted. The yearbooks of various progressive schools reveal, however, that commendable creations are not limited to a very few children.²⁸

Individual variations in æsthetic capacity. Although most children have capacity for some degree of æsthetic appreciation and expression, and far greater numbers of them have talent than we have been inclined to think, they are not equally endowed. Individual differences in natural power for creative art are clearly visible. If we had no other means for knowing this, we should perceive it from our everyday experience with children. It is easy to see that some are "to the purple born" as others are not; and the gulf that separates the most gifted child from the one least invested with talent is wide. How sizeable individual variations are we can gather best, perhaps, by examining the natural propensities of children for a single form of æsthetic expression. Because it has been most thoroughly surveyed, let us turn to the realm of music for illustration.

Even if we confine our attention to a single aspect of musical sensitivity, namely, pitch, and narrow our view to but one phase of it, namely *pitch discrimination*, we find wide divergence in children's abilities. By pitch discrimination we mean ability to distinguish differences between musical tones. Between any note in the standard scale and a whole tone above it, there are about 35 double vibrations per second. It is thus possible to estimate a child's capacity for pitch discrimination by noting the number of vibrations involved in the tone-differences he can distinguish. Those children who can detect minute dif-

²⁵Published in *Progressive Education*, April-May-June, 1926, under the title "Creative Expression Through Art."

²⁶Stanton, J. (Edited by Pratt, C.), *Before Books*, Greenberg, New York, 1926, pp. 304-336.

²⁷Harper's, New York, 1927.

²⁸See publications of the *City and Country School of New York*, the *Walden School of New York*, and the *Lincoln School of Columbia University*.

ferences of only a few vibrations are naturally superior in pitch-sense to those who cannot recognize such small variations in tone. It is told that Mozart on one occasion remarked on picking up a violin that it was pitched one-half of a quarter tone higher than the instrument he had used two days before. He showed by this gesture that he could carry in his memory a tonal difference of about four double vibrations. Undoubtedly he could do even better than this. By means of tests that are now available, at least one child has been discovered with the astounding ability to distinguish tones differing by one-quarter of a double vibration in pitch. On the other hand, these same tests show other children to be unable to distinguish differences in pitch so great as 50 double vibrations. Thus some children are about 200 times as sensitive to pitch as others.²⁰

The practical significance of these individual differences is great. They show, first, to what field of æsthetic expression the child had better commit himself, and second, what degree of success he may hope to achieve in the field of his choice. In the realm of music, for example, children who are able to distinguish pitch differences of 2 double vibrations or less are capable of becoming good musicians; those whose power of judgment lies between 3 and 8 double vibrations (this group includes a substantial majority of all children) can expect to become fair performers; those who can recognize differences of between 9 and 17 double vibrations have poor prospects of ever being able to perform creditably; and those who cannot tell two notes apart unless the difference between them is at least 18 double vibrations are so far devoid of pitch sense as to have no prospect at all for musical accomplishment. The latter are tone-deaf and had better forego any attempt to produce music.²¹ Schussler is authority for the estimate that but 5 to 10 per cent of children of school age are "unmusical."²² If this estimate is correct, it shows that musical experience may be enjoyed by the great majority of children. It also points to the need for discovering

²⁰Hollingworth, L. S., *Gifted Children: Their Nature and Nurture*, Macmillan, New York, 1927, p. 206.

²¹Adapted from Popenoe, P., "The Inheritance of Artistic Talent," *Journal of Heredity*, 20:418, September, 1929.

²²Hollingworth, L. S., *Special Talents and Defects: Their Significance for Education*, Macmillan, New York, 1923, p. 629.

for each child the aspects of music in which he shows greatest strength and the musical height to which he may attain.

The determination of æsthetic capacity. Since there is much to be gained from securing a rough estimate of the child's capacities for art expression, it would be a happy circumstance if there were available means for determining them. But there are at hand only a very few objective tests, and of these only several have been standardized. Moreover, the tests do not cover all the arts. The field of music has been studied more thoroughly than any other. Here the most reliable test so far devised is the *Seashore Musical Aptitude Test*. Standardized tests have been worked out for the determination of capacity for pitch, intensity, time, consonance, rhythm, and tonal memory. The apparatus of the test consists of six phonograph records, upon which the standardized exercises are recorded. Ingenious and invaluable as is this test, it is not without its drawback, since it cannot be taken by anyone with a mental age of less than ten, on account of the difficulty of understanding and following the directions. *The Kwalwasser-Dykema Music Tests* are shorter and more simple, and so serve the young child as the Seashore tests do not. But so far the former have not achieved the high degree of reliability of the latter.

If the tests available for measuring musical prowess have serious limitations, the shortcomings of those tests which seek to estimate talent in other fields of art are considerably greater. For one thing, there is only a handful of them available. For another thing, those which do exist are built to measure not art production, but art appreciation. Thorndike has devised two such tests. The one measures *design* appreciation, through having the child rank in order of beauty a series of figures (rectangles, crosses, designs) of varying proportions. The second test judges poetic sense. It provides one line of a couplet, together with a number of other lines of varying poetic merit. The test consists of selecting one of these with which to complete the couplet.³² Other tests likewise aim to evaluate the child's æsthetic judgment. One calls for the ranking in order of pref-

³²Thorndike, E. L., "Tests of Æsthetic Appreciation," *Journal of Educational Psychology*, 7:509, 1916.

erence of 36 Cosmos prints.³⁰ There are several scales for essaying drawing ability, notably those by Thorndike and Goodenough.³¹ As against the great mass of intelligence tests now available, these few tests seem paltry indeed.

Our survey of existing test devices compels the conclusion that until better and more comprehensive instruments are constructed and approved, our judgment of the æsthetic bent of children must be derived from experience. What the child actually does in the way of art creation will be an invaluable supplement to the verdict of objective tests, even when we achieve them. Lacking these tests, the resort to experience is even more imperative. This means that if we would discover a child's leanings for artistic expression, we must give him opportunity to show himself, fully and truly. In turn, the conditions under which he tries himself must be as free and as stimulative as possible.

V. Development of Æsthetic Capacities

Importance of æsthetic development. It is shameful that the definitely favorable disposition for æsthetic expression which children show when they are young should so commonly have become converted into either indifference or disdain by the time they reach adolescence. Apparently the remark: "All God's chillun got wings" tells only half the tale. Hughes Mearns completes it by saying that the child's wings are unobtrusively clipped by his associates in the course of his movement toward maturity. If this operation were not done so subtly, and with such lack of malice aforethought, the social protest against it would probably have powerful voice. For few of us would consciously wish to be guilty of mutilating the child so cruelly. Instead of clipping his wings, we should desire rather to strengthen them for actual flight.

³⁰Cattell, J., Glascock, J., and Washburn, M. F., "Experiments on a Possible Test of Æsthetic Judgment of Pictures," *American Journal of Psychology*, 29:333, 1918.

³¹Cf. Thorndike, E. L., "The Measurement of Achievement in Drawing," *Teachers College Record*, 14:345, 1913; Manuel, H., *Talent in Drawing*, Public School Publishing Company, 1919; Meier, N. C., *Æsthetic Judgment as a Measure of Art Talent*, Univ. of Iowa Press, 1926.

Granted that this is the desideratum, how may this development be accomplished? We may hope to cultivate the child's æsthetic interests by two primary methods, the one radically different in essence from the other. They may be designated the *formal* method and the *informal* method of art cultivation.

The formal method of cultivation. The formal method has been for some time the prevailing procedure in art education. It is characterized by (1) adherence to tradition and (2) regulative technique.

The force of tradition appears, for example, in the child's experience with music. Custom has hallowed the idea that, of all the forms of art, music is the one to be adopted by most children. Without particular thought as to the capacity of their children for musical expression, it has been the practice of parents to provide their children as often as possible with music lessons. Not only has little attention been paid to the extent of the children's musical ability, but as little thought has been given to providing them with instruments especially suited to their talents. Most children have been committed either to the piano or the violin.

The emphasis in the formal method upon regulative technique can be likewise illustrated by reference to the field of music. In addition to having his instrument selected for him, the child is presented with a definite plan by which to master it. This plan consists of two main parts: (1) forced practice and (2) ordered detail. The child *must* practice. Generally, a time limit is fixed, say thirty minutes a day, and the child practices with one eye on the clock. His lessons are all worked out in neat succession, according to some formal scheme in the mind of the teacher. The emphasis is upon the mastery of technique. Small wonder, then, that a child should remark: "Tedium, thy name is piano practice."

Lest the inference be made that this insistence upon technique in the early stages of art cultivation is confined to music, it may be well for us to note the usual system by which drawing is taught. The child is provided with a copybook, containing, let us say, pictures of animals. He is given tracing paper also upon which to copy the pictures exactly as he finds them. Then he cuts out the figures he has traced. Back of this activity is the

theory that all these contacts (tracing, cutting, retracing, cutting, etc.) will fix the figure upon the child's imagination. Besides, the child may be urged to draw from model a number of different shapes and sizes. He is not fascinated by these things, but he is told that he can represent them accurately if he will follow certain "steps" in drawing them. This is the way of the formal method.

What shall be our appraisal of this formal method? A fair test of any method is to be had in the results it achieves. By this test, the formal method ranks low. Its results are mostly of a negative sort. It does not induce delight for art in children, nor does it stimulate the creative impulses. It places attention to detail above self-expression. Although method and detail are essential to artistry, they are nevertheless subordinate in importance to the full and free exercise of the imagination. Especially in the case of little children the necessity is great for not hampering self-expression by insistence upon formal technique and procedure. Judged by its yield, then, the formal method of cultivation stands condemned. Its chief fault is its attempt to push art into the consciousness of the child, as if nothing were there, instead of permitting the child to pour out what he himself feels.

The informal method of cultivation. The approach of the informal method consists of drawing out of the child the tendencies to artistic expression that he possesses. This eliciting of the child's æsthetic impulses is effected essentially through three channels: (1) surrounding the child with beauty, (2) interpreting beauty to him, and (3) encouraging him to express his æsthetic impulses freely and fully.

1. Surrounding the child with beauty. If the child is to love the beautiful he must first come to know it. He can come to know it if it abounds in his experience. Hence the value of surrounding the child with an environment full of loveliness. Sensing this need, many of the progressive schools today seek to provide their children with a beautiful setting. Compare the formal, unæsthetic aspect of the traditional classroom with the comfortable, home-like, attractive meeting places of the new schools. Here is how the director of one such school puts the contrast, describing her own site:

Vision with me a school building set rather close to the street with virgin land extending on both sides and behind for acres; no fences, no grading, no surfacing nor trees cut down . . . No formal walks, flower beds or grass plots mar the glory of this semi-woodsie, rolling area where wild grain and flowers come and go with the seasons.

Stand at one side and observe a recess at this school. Gay, happy children run out of the buildings into the big out-of-doors. Up and down the hillets they run, roll and slide. They jump ditches, climb trees, dig in the earth making pools and harbors, using the rocks, tree branches and uneven ground to call out and shape their joyous play projects.

Compare the playground above with the average playground leveled to billiard table accuracy, surfaced with a hard, dazzling rock preparation and equipped with cold or burning hot (as the season affects them) steel poles and girders, ladders and chains . . .³⁵

Description of the "classrooms" at this school would show an indoor situation which corresponds in informality and beauty to the outdoor arrangement.

In addition to providing the child with an environment of beauty, there is value in supplying him with *art* materials. That child is fortunate who has access to a good library of books, paintings, phonograph records, and the like.³⁶ He will profit also from having materials that he can see and handle, such as various textiles, clay, crayons, charcoal, and water colors. That the average home does not as a rule supply the child with sufficient art materials is suggested by the finding of one research study that "the child may be educating the home in music even more largely than being educated by it." If this is true in respect to music, it is probably even more true as regards other art, for this same study reports that "whereas the typical family condition in music had been 'fair,' and that in literature 'good,' the modal value in the realm of pictorial art proved to be 'poor.'"³⁷

³⁵McKee, J., "Natural Play Situations," *Creative Work and Play*, Broadoaks School, Pasadena, California.

³⁶Guides to the selection of materials in literature, painting, and music are given in a special section of the bibliography for this chapter.

³⁷Peters, O. C., "Contributions of the Home to the Aesthetic Education of Children," *Journal of Applied Sociology*, 8:67, 72, November, 1923.

2. *Interpreting beauty to the child.* There are many who doubt that the mere provision of a beautiful setting is of itself sufficient to arouse and stimulate the children's æsthetic impulses. Were this so, children should be moved to an appreciation of beauty quite generally, for they are everywhere surrounded by the glories of nature. More is required than a setting. It is necessary to make children conscious of beauty by interpreting it to them, or better, helping them to interpret it for themselves.

It will be profitable for us to review a few instances indicative of the way in which children have been made art-conscious. Hughes Mearns has used the technique of masterful reading of beautiful literature as a stimulus to the use of beautiful language by the children themselves. He began with a group of students entirely untutored, uninterested in poetry. To them he read abundantly of choice literature. The children became interested in the subjects of the readings. Soon they took to discussing poetry with real earnestness. Then, without direct suggestion from their teacher, they began to write verses of their own. Some of their creations appear in the volume, *Creative Youth*.³⁸

What Mearns did for his group, individual parents have been able to achieve for their own children. One father read good books profusely to his two sons, in such a way as to make them intelligible and vital to the children. Not once did he suggest to either boy that he create compositions of his own. Yet one day the three-year-old appeared in his father's study, saying: "I have a poem in my head." From that time forward the boy has been having "poems in his head." His father's indirect methods have shown results.

Similarly, music may be interpreted to the child. At one nursery school the children's attention is directed toward the ordinary sounds of the city streets. From the roof of the school the children listen to catch as many different sound-effects as possible. Children and teachers then convert these effects into onomatopoeic phrases, like "thump-thump," and "tap-tap."³⁹ In this way their awareness of the rhythmic sounds everywhere

³⁸Mearns, H., *Creative Youth*, Doubleday, Doran, New York, 1925.

³⁹Johnson, H., *Children in the Nursery School*, John Day, 1928, p. 130.

about them increases. There is such a thing as listening creatively.⁴⁰

3. *Encouraging the child to express himself æsthetically.* We have seen how in certain situations the æsthetic stimulation which the child receives induces him to create things of beauty. No suggestion is made to him that he ought himself to be creative; he is introduced to beauty in such a way that he comes under its influence.

In another variety of the indirect method, no attempt is made to provide the child with models of beauty. He is furnished merely the tools essential to his art and encouraged to use them freely.⁴¹ One of the most celebrated exponents of this technique is Professor Frank Cizek. Working with boys and girls between the ages of seven and fifteen at his Vienna School of Arts and Crafts, he has caused art teachers everywhere to marvel at the high merit of his pupil's paintings. How has he been able to accomplish so much with children apparently of ordinary talent? Here is his own accounting of it: "I take the lid off and other art masters clap the lid on—that is the only difference."⁴² In Cizek's studio there does not appear a single reproduction of the work of the great masters. He discourages his students from attendance at the art museum. He feels that each one of his students has a message and a spirit of his own, and these he encourages each one of them to express.⁴³

A third variety of the informal method embodies all three of the elements we have considered: the child is introduced to beauty, the beauty is interpreted to and by him, and he is induced to create beauty for himself. No more conspicuous instance of the successful utilization of this technique can be cited than Mrs. Sadis Coleman's work in music at the Lincoln School of Teachers College, Columbia University. Under her direction children, first of all, fashion instruments of their own. At the

⁴⁰Cf. Seymour, H. A., *How to Think Music*, Schirmer, New York, 1910; Surotte, T. W., *Music and Life*, Houghton Mifflin, Boston, 1917.

⁴¹Cf. Munro, T., "A Constructive Program for Teaching Art" in Dewey, J., Barnes, A. C., and others, *Art and Education*, Barnes Foundation Press, 1929, pp. 311 ff.

⁴²Quoted by Rugg, H., and Shumaker, A., *The Child-Centered School*, World Book Co., Yonkers-on-Hudson, 1928, p. 229.

⁴³The same holds for the Open Air Art School, conducted by the Mexican government for its native Indian children.

age of five, six, and seven they construct very simple things: water glasses, rattles, drums. As they gain in skill and perception, they turn out xylophones, marimbas, pipes, flutes, psalteries, harps, and even violins. Second, these same children learn to play the instruments they have made. Third, the children are inspired to compose music. The Symphony Orchestra of the Lincoln School consists of *every* child in the fourth, fifth, and sixth grades. The music they play is of their own invention. At the same time that the children are doing all these things, they are studying the history of music, and appreciating the relation of music to the other arts and to life generally.⁴⁴

Mearns, Cizek, Coleman—though in some respects employing techniques that differ—all agree upon the superiority of the informal over the formal method. All three are united upon the desirability of allowing the child to express in his own way the capacities for art which he possesses.

VI. Subsequent Discussion

We have acknowledged in the foregoing discussion the part that beauty plays in the enrichment of the child's life. Æsthetic appreciation and expression both enlarge the child's universe. The child feels the power of forces outside himself. At the same time, he builds up conceptions about his relation to the universe and the relation of the universe to him. In fine, he constructs his religion. We shall in the next chapter inquire into the nature of the child's religious experience.

READINGS

1. "Are All Children Potential Artists?" *Child Study*, 9: No. 4, December, 1931.

(This is a symposium discussion. Read any two articles. Compare them as to their viewpoint and contribution.)

⁴⁴See Coleman, S. N., *Creative Music for Children*, Putnam, New York, 1922.

2. Blair, E. N., "Books for Growing Children," *Good Housekeeping*, 93:92, November, 1931.
(What "types" of book are suitable for children at various age levels? Is the kind of book that most appeals to a child the sort he ought to have? Why? Which books mentioned are familiar to you?)
3. Cizek, F., "The Child As Artist," *Independent*, 113:541, December 20, 1924.
(In what respects does the view expressed here differ from your own? What is the evidence upon which Cizek rests his case?)
4. Coleman, S. N., *Creative Music for Children*, Putnam, New York, 1922.
(This is a standard work in the field. Read what appeals to you. What makes music "creative," according to this writer?)
5. De Nanerède, E., "Creative Possibilities of Art for Children," in *The Child's Emotions*, University of Chicago Press, 1930, p. 306.
(What field of æsthetic expression holds the widest appeal for children, in the view of the writer? Do you agree? Why?)
6. Doing, R., "Creative Expression Through Music," *Progressive Education*, January-February-March, 1927.
(How do these children respond to music? To what end? How does the writer's main thesis impress you? Why?)
7. Doud, M., "Children and Poetry," *Library Journal*, 50:789, October, 1925.
(What types of poetry are preferred by the child? By what means can the child be prepared to adventure further into the realm of poetry?)
8. Gibson, K., "Art and Tony," *Atlantic Monthly*, 131:678, May, 1923.
(Why did Tony like the Bugolini Madonna? How do you interpret this?)
9. Hartman, G., and Shumaker, A., Ed., *Creative Expression*, John Day, New York, 1932.
(A collection of four valuable previous issues of the magazine *Progressive Education*, containing 57 articles and many illustrations of the art of children, some in color. Examine the drawings. Could the children you know do as well, if properly encouraged?)

10. Hartt, M. B., "The Child's Museum," *Parents' Magazine*, 5:23, September, 1930.
(What appeal does the museum make to children? How start one?)
11. Johnson, H., *Children in the Nursery School*, John Day, New York, 1928.
(Read beginning p. 117—What does the writer show about the nature of children's speech? How do children use color—pp. 211-220? What use do they make of crayons—pp. 220-230?)
12. Mearns, H., *Creative Youth*, Doubleday, Doran, New York, 1925.
(Examine the creations of children in the latter part of the book. Do you think these children have more than ordinary talent? Why?)
13. Pratt, C., and Wright, L. E., *Experimental Practice in the City and Country School*, Dutton, New York, 1924.
(Read pp. 35 ff.—What position with reference to children's art is taken? Read pp. 193 ff.—What in this account of children's play impresses you most favorably? Why?)
14. Rounsley, K. P., "Latent Creative Ability," *School and Society*, 33:846, June 27, 1931.
(What was the "experiment" that this teacher performed? With what results? If possible, try the experiment yourself.)
15. Rugg, H., and Shumaker, A., *The Child-Centered School*, World Book, Yonkers-on-Hudson, 1928.
(Chaps. XI-XX deal with various aspects of æsthetic experience. Read any one of these chapters. What new addition does it make to your thinking on the subject? What in it impresses you most?)
16. Scott, J. L., "What Parents Can Do to Further the Musical Education of the Child," *Etude*, 50:325, May, 1932.
(List the suggestions given. Could these same things be done as well by persons other than the child's parents? Defend your view.)
17. Sherman, M., "Are Day-Dreams Dangerous?" *Parents' Magazine*, 5:16, September, 1931.
(How common is fantasy among children? What two kinds have been recognized? What part does fantasy play in art expression?)

18. Simonson, I. S., "Child's Outlook Upon Life Through Literature," *Library Journal*, 53:17, January 1, 1928.
(What benefits accrue to the child from the reading of folklore, nursery rhymes, etc.? Do you agree? What is the scope of children's reading in this field? Of the stories named, list those you know.)
19. Taggard, G., "Children Really Like Poetry," *New Republic*, 52:353, November 16, 1927.
(Explain: "Children are the Great Particulars; poetry is never alive in the abstract." How may poetry be made "real" to children?)
20. "Where Children Play at Giving Plays; Hecksher Theater for Children in New York," *Literary Digest*, 86:25, August 1, 1925.
(What are the various steps these children take in preparation for the production of a play? What advantage has this technique?)

Suggestive Materials for the Child's Art Library

Literature (The following are guides to the selection of books appropriate to the child's age-level.)

- Dalglish, A., *First Experiences with Literature*, Scribner, 1932.
 Hunt, C. W., *First Three Hundred Books for the Children's Library*, 4th ed. rev. (gratis), University of the State of New York, 1931.
 Shuttleworth, F. K., *Critical Study of Two Lists of Best Books For Children*, Clark University Press, 1932.

Painting

- Berry, Ana M., *Art for Children*, Boni, 1929.
 (Especially recommended. A collection of pictures from a wide variety of art centers.)
 Berenson, B. B., *Series on Italian Painting*, Putnam.
 Boas, F., *Primitive Art*, Harvard University Press, 1928.
 Craven, T., *Men of Art*, Simon and Schuster, 1931.
 Gardner, H., *Art Through the Ages*, Harcourt, Brace, 1926.
 Hagen, O., *Art Epochs and Their Leaders*, Scribner, 1927.
 Kowalczyk, G., *Decorative Sculpture*, Weyhe, 1926.
 Reinach, S., *Apollo*, Scribner, 1924.
 Vasari, G., *Lives of the Painters, Sculptors and Architects*, Dutton, 1927.
 Worringer, W., *Form in Gothic Art*.

*Recommended Reproductions**Klassiker der Kunst**Propylæen Series**Seaman Prints**Music*

Coleman, Satis N., *Creative Music for Children*, Putnam's, 1922.

Music and the Child, Child Study Association of America, 1930.

(A critical evaluation of the outstanding literature. Listings of books, phonograph records, and music rolls, for various ages and levels of music experience.)

CHAPTER XIII

THE CHILD AND RELIGIOUS EXPERIENCE

"But trailing clouds of glory do we come
From God, who is our home:
Heaven lies about us in our infancy!"

—WORDSWORTH

I. Introduction

In this chapter, we shall have our attention engaged by five major matters. First, we shall clarify our concept of religion. What does the child's religious experience include? Second, we shall consider the bases of the child's religious experience. From what sources is it derived? We shall observe that the child's religious life is determined for him partly by the educational policies of his guardians. Consequently, we shall examine, third, various methods of religious education which they employ. Fourth, we shall observe the nature of the child's religious experience itself. What are his attitudes toward the universe? What are his religious concepts and practices? How are they modified as he matures? Finally, we have to note the benefits to the child of religious life, and especially the bearing of his religious experience upon his conduct. Thus, fifth, we shall conclude our discussion by considering the significance of the child's religious experience for his life generally.

II. Meaning of Religious Experience

Belief and practice. Religious experience is so vast and pervasive an affair that for us to attempt to declare its details and define its limits would be stark presumption. Fortunately,

our present need requires but a general delineation of the content of the child's religion. We may conveniently group its elements under the two heads of *belief* and *practice*. Every child as he develops evolves a disposition toward life. He feels and thinks certain ways about the world in which he finds himself. These evaluations of existence compose the child's philosophy. His beliefs and feelings about reality are furthermore attended by certain concrete practices. The child learns, let us say, to pray and to attend church services. These formal elements in many cases are the media through which he expresses his thoughts and feelings about the universe. But belief and practice in the life of the child are not always consistent.

Individual and social aspects. It is profitable also to consider the child's religious experience from both the individual and social standpoints. The child comes to view the sum total of his experience in a certain way. He is agreeably impressed with life as a whole or he is not. All these reactions to life, all these estimations of it, are distinctly personal matters. In a vital sense, therefore, religion is for the child an inner and individual experience. But it is impossible to harbor thoughts and feelings of such moment without betraying them in conduct. They affect the child's manner of living. A child's religion shows in his overt conduct as well as in his deepest convictions. In this way, the social aspect of religious experience is indicated.

III. Sources of Religious Experience

How does the child get his religion? What are the forces that shape it? It is perfectly clear that the child's religion is due in part to his own nature and in part also the circumstances of his life. He absorbs much from the environment in which he finds himself, but his nature determines in some degree what he shall absorb. In seeking for the roots of the child's religion, therefore, we must penetrate into both his own psychological nature and the social situation in which he finds himself.

Origins in child nature. There are, in the mind of the child, certain native impulses which early dispose him toward religious experience. Such a dynamic force is the child's natural curiosity about his universe. He has a mind that will not cease its

questioning until it receives suitable answer. Very early, sometimes as soon as the third year, the child asks questions about the nature of the world and the origin of life. About the sixth year, Bovet reports "a characteristic and spontaneous outburst of metaphysical curiosity."¹

The child's natural feeling of insecurity in life acts also as a predisposition to religious experience. More than any other new-born creature, the human infant is dependent for survival upon the ministrations of others. This sense of personal insufficiency disposes the child to recognize his dependence upon resources other than his own. His reaching out for spiritual support is one of the spontaneous expressions of his disposition for religion.

It is possible in the same way to enumerate other elements of human nature which lead the child to religious experience. Such are his native desire for affection and his inherent bent for fantasy. The roots of religious experience thus lie deep in the soil of the child's own nature. Were this not so, it would be difficult to account for the presence of religion in every known society, no matter how primitive.²

Origins in culture. Although religion is inherent in the nature of the child, the religion he embraces is the outcome of his social experience. His environment shapes his amorphous inner strivings. If he is made into, let us say, a Presbyterian or a Methodist, this will be because Methodism and Presbyterianism exist as religious systems in his experience. Eskimo children not reached by missionaries cannot become Christians. They can take on only such religious beliefs as prevail in their setting. We know that children will learn to speak any language generally spoken around them in their childhood. So, too, they acquire the language of the religion that their culture promotes. Our children entertain the idea of a heaven, but Eskimo children think in terms of a number of heavens, in some cases as many as seven. Our children, further, picture heaven as not so warm as hell, but Eskimo children conceive of heaven as having the heat of the fiery furnace. The culture that surrounds a child

¹Bovet, P., *The Child's Religion*, Dutton, New York, 1928.

²Of. Wissler, C., *Man and Culture*, Crowell, New York, 1923, Part II, Chap. V.

thus supplies the content of his religious system. As culture converts the native sounds of the child into coherent speech, so too culture transforms the innate spiritual strivings into the language and liturgy of organized religion.³

Origins in family experience. The family is the agency through which the child is introduced to his civilization. It is the selective agency which determines for him what he shall call his own. On this account the child's family life determines his religion for him more definitely and more largely than any other feature in his experience. We are accordingly warranted in examining in close detail certain ways in which the family gives the child his religion. In particular we shall look at three home sources of the child's religious faith: (1) the home atmosphere, (2) informal home experience, and (3) formal parental teaching.

1. *Home atmosphere.* Every home inevitably leaves its religious imprint upon the children who live there. The helpless babe relies upon those about him for his survival, to say nothing of his comfort. His nature calls out for protection and love. Naturally this call goes to those who have him in charge, his parents. Their care of him will give him his first impressions of the kind of world in which he lives. In a very real sense, therefore, the child's first religion is a kind of parent religion. They are his first gods.

Much of the child's religious future depends upon the kind of parents he happens to have. If they are mismated, if they wrangle, if they are abusive, the child soon feels his world is not a kindly, happy one. He finds little to worship in his gods. If his parents extend their displeasure to him and deal meanly with him, his view of his universe may darken even more, and he may stand in actual fear of it. All later teaching about the goodness of God that may be given him by others will be impeded by the earlier reality he witnessed in his home. It is told of a Sunday School teacher that she wished to impress upon her charges the beautiful beginning of a prayer starting "Our Father." So she added this statement, intended of course to be rhetorical, "I love the way it starts, 'Our Father.' We all

³Cf. Soares, T. G., *Religious Education*, Univ. of Chicago Press, 1928, Chap. IV: "Religion as Folkways."

have fathers, haven't we?" "Yes," answered one peaked little girl, "My father slaps my mother and pulls her hair and swears at us somethin' awful."⁴

Happy, wholesome homes have equivalent power over the child's religious development. Through their provision of care and comfort, they supply him with a sense of confidence in life. It is a short step from having a good home to feeling "at home" in the universe. Thus it is that one way or another, often quite unwittingly, the home colors the child's religious outlook.⁵

2. *Informal home experience.* Operating as an additional religious influence in the life of the child, we may observe his actual experience at home. Two homes may be equally wholesome and happy, yet the children in them be differently impressed because their experiences are not the same. It is necessary, furthermore, to recognize two kinds of home experience as providing the child with his religious thinking. They actually form two sorts of teaching. The one is informal or unplanned; the other is formal or deliberate.

One home situation in particular has marked influence upon the child's religious life, namely, *parental example*. In the religious field as everywhere else, the patterns of belief and conduct which the parents reveal from day to day are both consciously and unconsciously imitated by their children. It is interesting to note the findings of one study on the relation between the religious conduct of parents and that of their children. A survey of an entire community showed that where the parents themselves attended Sunday school, 92 per cent of their children also attended Sunday school; but where the parents did not go, only 28 per cent of the children attended.⁶ There can be no doubting the fact that the negative example set by parents has had a great deal to do with the lessened interest of children in church-going and formal worship.

The most powerful religious examples in the life of the child are those which his parents set him during critical episodes in family experience. The real religion of the group emerges at

⁴Watson, Goodwin, *Religious Education*, 19:387, December, 1924.

⁵Fahs, S. L., "The Beginnings of Religion in Baby Behavior," *Religious Education*, 25:896, December, 1930.

⁶Franklin, S. P., "A Community Study: Berea, Ohio," *Religious Education*, 24:308, April, 1929.

such times, and it is so colored with emotion as to cause it to penetrate deep into the child's consciousness. The vital experience may not necessarily be connected with any of the matters of formal religion. Thus Jane Addams remembers the day of Lincoln's death by the expression of her father's face on his return home after he had heard the news. This striking impression of the deep feeling of her father for another man must have helped to shape her own sympathies for humanity. The way in which a child's father and mother meet situations involving disappointment and pain indicate to the child the values they think most worth living for.

Critical family episodes involving traditional religious elements are likewise capable of leaving their impress upon the mind of the child. One minister has given us insight into his own early religious education. Among other things he tells how as a child of five he was taught the doctrine of personal salvation through Christ. It happened that about this time a very dearly beloved grandfather died after an illness of some weeks. He was acknowledged by all to be one of the finest men in the community. Yet he was not a church member, and died "unsaved." The five-year-old boy felt the loss of the grandfather he adored. But his feeling of personal loss was converted into compassion for his grandfather when, afterward, he saw his grandmother sitting with her Bible on her lap, weeping and whispering to herself again and again, "Poor Grandpa! Poor Grandpa!" Says the minister, "I felt that she was lamenting an eternal separation, and her tears burned furrows into the tender heart of the child."

3. *Formal parental teaching.* As a rule parents undertake to direct the religious thinking of their children along certain well-defined paths. The parents have religious conceptions and practices which they are eager that their children shall assume. Indoctrination of this sort goes on everywhere, in homes representing every manner of religious belief. But the indoctrination is probably nowhere better achieved than in Catholic homes generally. For this reason it will be profitable for us to sketch the features of the indoctrination of the Catholic child as

"A Boy's Religious Autobiography," *Religious Education*, 15:24, February, 1920.

demonstrative of the power that formal teaching exerts in shaping the child's religious experience.

Here is a recounting of some of the influences that are conspicuously brought to bear upon the child in a good Catholic home. From the beginning certain material religious representations are present in the baby's room: a crucifix or a statue of Christ or a picture of Christ. Almost invariably there will be a Madonna. Over and over again the little child is told the Christ story. About his neck he wears a gold chain, from which hangs a medal of Jesus or Mary. He can both see and feel it. He absorbs its meaning through many channels. At his cribside he hears the saying of prayers by the members of his family. When Christmas comes, he sees beside the tree a miniature representation of the crib of Bethlehem. When he begins to talk, he is taught the "Our Father" and "Hail Mary." He will now trace the sign of the Cross and say prayers. From time to time he will be taken to church. He will early come to know the nature of Mass. At the age of seven the obligation to hear Mass falls upon him. Now he makes his First Communion. "That First Communion is surrounded by all the pomp and solemnity possible, and the experience is burned into the consciousness of the child."⁸

The less faithful performance of religious obligations by Protestant children generally results from their failure to secure such regular and rigorous schooling as Catholic children. Dr. Albert Beaven, when pastor of the Lake Avenue Baptist Church of Rochester, New York, sought to discover the religious practices carried on in the homes of the members of his congregation. Of those replying to his questionnaire, 302 reported regular attendance at church. Yet only 185 attested to their having grace at table, and a much smaller number, 81, said they had some sort of "family worship" at home.⁹ From this study and others it appears that the Protestant homes sponsoring the observance of religious rites for the family as a whole constitute a small minority.

⁸Ross, J. E., "Religious Worship in the Life of the Catholic Child," *Religious Education*, 26:714, November, 1931.

⁹Beaven, A. W., "Capturing the Home," *Religious Education*, 22:832, October, 1927.

Permanence of home influence. Thus we see how the basic elements of the child's religious life are provided by his early experience. The child's natural, but amorphous, inclinations for religious experience are given specific form and content by the social forces in his environment. Of all these agencies shaping his spiritual life, none surpasses his home in its influence. Family influences are important because they come first and because they affect the child in such a variety of ways. The influence of the home is primary whether the child later reacts against his early training, or whether he remains favorably disposed toward it.

Although religious beliefs and practices established in early childhood seldom if ever remain *in toto* throughout the growing child's experience, nevertheless there are always vestigial remains of this early teaching. While the content of the religious thinking of children alters quite considerably with maturity, their religious activities and observances change much less. In a word, children may not have the same ideas as their parents when they grow up, but they are likely to retain the old practices.¹⁰ The content changes but the forms abide. It is easy to understand the wisdom of the Jesuit priest who said if he could have the religious direction of the first seven years of a child's life, he did not much care who sought to influence the child thereafter.

IV. Methods of Religious Education

Since religion comes to a child by contagion as well as by definite instruction, clearly it is not possible for a child to grow up without a religion. If religion experience is inescapable, the matter and manner of the child's religious education become concerns of the first importance. Accordingly, the practical questions confronting the child's guardians are two: what shall he absorb and how shall he absorb it? To these questions we find two major answers, which represent a sharp difference in point of view. These two views we may designate as the standpoints of *laissez-faire* and *indoctrination*.

¹⁰Shuttleworth, F. K., "Influence of Early Religious Home Training on College Sophomore Men," *Religious Education*, 22:57, January, 1927.

"*Laissez-faire*." There are parents who for one reason or another submit their children to no credal teaching. In some cases, this results from the fact that the parents themselves have no definite beliefs they can impart. They are indifferent to formal religion. Their failure to provide specific religious instruction for their children is not a matter of policy so much as a matter of sheer neglect. However, there are other parents who feel that the child ought to be free to arrive at his own faith. They will interpose no obstacles to this end in the form of traditional creeds which they themselves hold. Still other parents are of the view that the religion that counts for most is not a matter of credal belief and ritual, but a spiritual attitude that disposes the child to live well with his God and his fellow men. In their view, this "real" religion is best instilled, not through instruction, but by the inspiration of good living on their part. That the "*laissez-faire*" view appears in these different guises can be seen from an examination of two specific cases.

(1) Perhaps the best known exponent of the "*laissez-faire*" doctrine of religious education was James Mill, the famous father of an even more illustrious son, John Stuart Mill. The elder Mill was committed to the purpose of making his son extraordinarily well-educated. He achieved his purpose. But he sought from the outset not to prejudice his son's mind in any given direction. He was himself sensible of the difficulty of knowing the truth and determined that his own convictions should not stand in the way of his son's quest of reality. He would open up the realm of knowledge to his son and let him arrive in it where he would. The elder Mill gave his son much of his time and knowledge, taking pains always to present all sides of the question at hand so as not to bias his son's thinking.¹¹

(2) The son of a Presbyterian minister, writing about his religious training, tells how as a child he was "never indoctrinated with religious truths." He was not required to learn even the shorter catechism. But he tells us that his mother's spiritual nature inspired him. She courageously labored for the causes in which she believed. "I was never taught religion," he writes,

¹¹See *The Autobiography of John Stuart Mill*, Columbia Univ. Press, 1924.

"but I caught something from my parents by contagion . . . I think I got religion that way in conversation with my mother, *because we did not talk about religion.*"¹² It is noteworthy that this is the testimony of a man who at the time of writing was a professor of Christian theology.

Indoctrination. Opponents of the *laissez-faire* approach to the child's religious education hold that it is fallacious to think the absence of definite religious instruction leaves the child in a position to make an unbiased choice of his own. These critics say: the child will build up his religious philosophy as he matures. If he gets no direction from his parents, he will get it from other and, likely, less desirable sources. Parental inaction only leaves the child free to be shaped by others. The opponents of the "*laissez-faire*" view thus declare for definite religious training of the child. But these advocates of indoctrination are not themselves of one mind as to how this training should be accomplished. It is possible to recognize among them two distinct schools of thought, which we may designate *formalism* and *idealism*.

1. *Formalism.* At the opposite extreme from those who advocate no specific religious instruction at all we find those who urge that the child be taught the traditional credal thought and practice of his forbears. The latter are formalists because of their strict adherence to the prescribed and established forms. They believe that the child should be made familiar with the entire substance and detail of a religious system. The foregoing description of the religious education of a Catholic child revealed schooling on this order. Following is an account of the religious education along formalistic lines of children in a Protestant family. The picture presented is one far more extreme in nature than we should commonly find. Its unusual nature should help to make formalism as a method clear to us.

From the age of seven, every child in the X family was required by the father to read the Bible completely through once a year, after a plan proposed by him. One daughter carried this performance through seventeen times. In addition, every day was begun with prayer and Bible reading. A blessing was asked

¹²Wieman, H. N., "How I Got My Religion," *Religious Education*, 26:841, December, 1931.

upon each meal, all standing. At the close of day prayer was said again, the Bible read once more; then each child was thoroughly interrogated by the father as to his use of the day. Sunday evening was regularly given over to the religious instruction of the children. While the mother attended church in the vicinity, the father took the children in charge. His procedure was regularized. First the children went through the catechism, with the father occasionally clarifying a vague point or emphasizing a precept. Next came the group reading of the Bible, and last a lecture by the father to his children on the moral dangers besetting them, and the way to salvation.

Every method has its critics and formalism is no exception to this rule. Objection is commonly raised against its indifference to contradictions in the teachings themselves.¹³ Where the parents pass on to their children beliefs which they themselves do not cherish, they are accused of dishonesty. One mother was asked by her four-year-old child where God lived, to which she replied, "In heaven"; and in response to the further query as to where heaven was she said, "In the sky." Fosdick, who cites this episode, calls the mother's replies "downright falsehoods."¹⁴ The implication is of course that she did not herself believe what she said.

Formalistic teaching of an extreme sort contains certain unwholesome emphases against which the mental hygienists strongly inveigh. Most of these have to do with the arousal of fear-complexes within the child. In commenting upon her own experience, a member of the X family mentioned on page 275 revealed that her father's cross-quizzings at the close of the day often left her with a deep sense of guilt which she could not shake off. She lay awake nights lamenting the accidental slips she had made in her behavior, slight and inconsequential, but now after her father's scrutiny seeming like dire transgressions against the will of God. Too, she was sometimes distressed by her father's Sunday sermons, to the point of often regretting that she had ever been born.

There can be no challenging the desirability of having

¹³Cf. Williams-Ellis, A., "Children and Religion," *Spectator*, 145:618, November 1, 1930. See the next two issues for counter-arguments.

¹⁴Fosdick, H. E., "Teaching Your Child Religion," *World's Work*, 58:52, February, 1929.

religion wholesome for children. This calls for the elimination of instruction calculated to instil fear. Tanner found that 15 per cent of the 315 children he examined between the ages of eight and fifteen were afraid of God.¹⁵ Fortunately the inculcation of fright as the means to securing conformity is largely a method of the past. It is not often today that we hear a sermon such as Jonathan Edwards used to preach, "when men and women clung to the pillars of the church to keep from slipping into hell."¹⁶ Nor would such wide sanction be found today for a stanza like the following, taken from a book of children's hymns published in 1852:

There is a dreadful hell
And everlasting pains:
There sinners must with devils dwell
In darkness, fire and chains.¹⁷

To hold, however, that the teaching today is entirely devoid of the fear element would be false. There is, for example, the familiar child's prayer:

Now I lay me down to sleep,
I pray the Lord my soul to keep.
If I should die before I wake,
I pray the Lord my soul to take.

Most children who use this prayer do so without having their attention attracted to the morbid possibility of their dying in the night. The temperament of the child may be an important consideration here, and also the thought which the child gives to what he is saying. But this prayer works harm in enough instances to justify revision of the last two lines.

2. *Idealism*. Not all the critics of formalism are to be found in the ranks of the "laissez-faire" contingent. There are many students of religion who believe in definite religious instruction for the child but who dissent from the emphasis upon

¹⁵Tanner, A., "Children's Religious Ideas," *Pedagogical Seminary*, 13:511, 1906.

¹⁶Haydon, A. E., "The Child's Emotional Life and Religion" in *The Child's Emotions*, Univ. of Chicago Press, 1930, p. 266.

¹⁷From *Hymns for Sunday Schools, Youth, and Children*, 1852; cited by Wilson, D. F., *Child Psychology and Religious Education*, Doubleday, Doran, New York, 1928, p. 63.

form and detail. They feel it is more important for the child to acquire the spirit of religion than to acquire its theology. They are not anxious to pass on a body of dogma intact; they wish rather to instil certain fundamental principles which they regard as essential to the good life. One writer proposes that the child should be taught: (1) religion is a *positive* force, (2) the center of religion is the character of God, (3) religion is intertwined with beauty and fullness of life, (4) the essence of religion is service, and (5) revelation is everlasting.¹⁸

If we turn to the ways in which the formalists and idealists present the idea of God to the child, we perceive even more clearly the divergence of their procedure. The former are likely to give the child an anthropomorphic conception of God. The latter are disposed to describe Him in more general terms. In their view, God is love, God is spirit. He does not live in heaven, but in the hearts of loving men.¹⁹ A mother who thought this latter way was asked by her four-year-old son about the nature of God. She pointed out to him the many good things that he and she enjoyed which were not of their own creation: the world and all the good things in it. For such things as these, she told him, God was responsible. Then the boy wanted to know where God slept and what he ate. She replied she did not know, but she doubted if God needed either to eat or sleep. "Because," she said, "God lives in the hearts of men." This explanation was not acceptable to her son. He continued his faith in a material God. His mother did not curb his belief, but simply reiterated her own view when he questioned her further. Within a few months, apparently quite naturally, he came around to his mother's view and accepted God's dwelling place as the human heart.²⁰

The critics of this sort of representation find fault with it on the ground that children commonly think in terms of the precise and the concrete rather than the abstract and general. In the case cited the little boy would not at first assent to his mother's conception. Careful students of the thought life of children state

¹⁸Miller, H. C., *The New Psychology and the Parent*, Boni, New York, 1928, p. 208.

¹⁹Cf. Fosdick, H. E., "Teaching Your Child Religion," *World's Work*, 58:52, February, 1929.

²⁰Forest, L., *Child Life and Religion*, Smith, New York, 1930, pp. 1-3.

that the little child prefers the definite concept over the indefinite concept. The following account leads to the same conclusion. A five-year-old girl on looking through a volume of drawings by William Blake came upon a particularly impressive Jehovah. "Is this a photograph of God?" she asked her mother. She was told it was not a photograph, just the artist's impression. Then she wanted to know if William Blake had ever seen God. She was told no, that he used his imagination. Others, said her mother, think God is a Spirit, not a person. On being pressed, the mother revealed that she conceived of God as a Spirit. "Well," remarked the five-year-old, "I *don't*—I'm going to believe He looks just like this—at least until I'm a big girl."²¹

V. Nature of Religious Experience

Religious interests of children. We have already observed how the roots of the child's religious experience are to be found in certain aspects of his inherited nature. We are now ready to see how these natural predispositions manifest themselves. Very early, as soon as the child begins to ask questions generally, he inquires about the origin of life and the nature of the universe. It is a matter of importance that all his early interests are continuous. He asks questions about the universe along with questions about other things. His metaphysical and practical queries intermingle. He does not behave as if things religious ought to be in a category of their own. To wit, the following prayer of a three-year-old boy:

God bless Mother;
God bless Daddy;
God bless Daddy's car.

How long this tendency persists to regard things religious along with other things, we do not know, but the following essay on "How I Have Fun" was composed by an eight-year-old girl.²²

²¹*Child Study*, 8:80, November, 1930. Reprinted by permission of Child Study Association of America.

²²Powell, M. C., "The Religious Experience of the Junior Child Under the Conditions of Modern Life," *Religious Education*, 20:10, February, 1925.

I have fun going to school.
I have fun in summer.
I have fun playing house.
I have fun with my dolls.
I have fun with the girls.
I have fun with my God.

In the eyes of the child, as Browning thought it must be in the eyes of God, all good things are equally worthy.

Characteristics of children's religious interpretations. Above all others we are indebted to Jean Piaget of the *Rousseau Institute* for thoroughgoing analyses of the ways in which children interpret the world about them.²³ On the basis of long study he concludes that children's "philosophies" have three characteristics. They are (1) realistic, (2) animistic, and (3) anthropocentric.

1. *Realism.* We have already seen that little children prefer definite pictures of God over abstract characterizations. This illustrates the realistic interest of the little child. Everything that exists is for him real. Everything has an objective reality for him. He does not have to touch or feel it. If he thinks it, it is real to him, in the same way that his ball and blocks are real. Piaget explains this phenomenon by saying the little child confuses the subjective and the objective; or better, he does not distinguish between the two. Thus when Piaget asked sixty children between the ages of four and twelve, "What do you think with?" all the children under seven answered, "We think with our mouths."

2. *Animism.* The little child thinks further that all of life is animated. The child under six generally regards as alive everything which in any way serves him. The moon is alive because it lights his way at night; the sun is alive because it keeps him warm; even stones are alive because he can throw them. After the age of six, Piaget recognizes a general tendency for the child to reserve animation to mobile objects. The sun and moon are still alive for him, because they move, but now the

²³For the complete account of Piaget's research, see *The Child's Conception of the World*, 1929, and *The Child's Conception of Physical Causality*, 1930, Harcourt, Brace; for a shorter report see "Children's Philosophies" in *Handbook of Child Psychology*, Edited by Carl Murchison, Clark Univ. Press, Worcester, 1931, p. 377.

stones are not. After the age of eight, Piaget finds that children further restrict the attribute of life to things capable of moving themselves.

3. *Anthropocentrism*. "Who made nature?" If this question is put to little children they will reply in substance, "Man made nature." Piaget found that up to the age of seven or eight children tend to ascribe the objects of nature to man's devising. Piaget calls this kind of explanation *artificialism*. If, however, we emphasize the fact that man is regarded as the creator of things, it is perhaps more appropriate to call this type of thinking anthropocentrism.

The young child's religion is, in short, specific, actual, vital, and self-centered. His God is a real, living human being, with whom he is on intimate terms. The child indicates by word and action that his religion is for *him*. This is what we should expect of the egocentric personality of childhood. The child's first thought is for himself. When a group of first-graders were asked to tell why they liked Christmas, they revealed it was mostly because of the things they received. "Christmas was an occasion to appease their acquisitive tendencies to the pitch of greediness."²⁴

Religious concepts of children. Having noted some general features of the child's religious thinking, we may now look at his definite conceptions. His concepts of God afford good illustrative material. When Barnes asked more than a thousand children to write compositions embodying their ideas of Heaven and Hell, he found that practically all under fifteen years of age pictured God anthropomorphically. The three attributes most commonly ascribed to Him were (1) age, (2) size, and (3) power. He was generally described as venerable, big, and omnipresent. "He is so large that He could stand with His feet upon the ground and touch the clouds," wrote one child. And another declared, "He can go through a keyhole."²⁵

The child's picture of God is one thing; his grasp of the meaning of God is another. How well does the child understand

²⁴Freeman, H., "First Graders' Religious Ideas," *School and Society*, 34:733, November 28, 1931.

²⁵Reported in Blanchard, P., *The Child and Society*, Longmans, Green, New York, 1928, p. 159.

the concepts that he learns and uses? In the effort to determine the accuracy of their religious thinking, 2,500 children between the ages of eight and eighteen in church schools were asked to identify sixty religious concepts. The child's answer was then checked against a standard definition of the term supplied by authorities. Although very few definitely wrong ideas were given, the answers to many concepts were quite vague. The children lacked clear understanding of such terms, for example, as "conversion," "savior," and "Christian." The director of this study concludes that, on the whole, "the religious thinking of the children is inadequate, vague, and confused."²⁶ This research arouses the suspicion that the fault lies not with the children but rather with the religious education they receive, for the study shows that length of Sunday school attendance has no influence upon their performance in the test. MacLean writes after a comprehensive survey of the way in which the concept of God is presented to the Protestant child: "Protestant teaching on the subject of God may be characterized as a confusion of incompatible and contradictory ideas."²⁷

Religious practices of children. Children not only acquire religious ideology as they mature, but they take on certain religious activity. Many attend Sunday school and church services, and engage in the regular order of worship. Children generally attend Sunday school more often than church. When a study was made of the religious practices of more than 5,000 Kansas City, Missouri, children it was found that boys in this city go less often to Sunday school as they grow older, whereas girls show as much interest at the higher age levels as they do at the lower.²⁸ Thus it appears that, in this community at least, boys are less attracted than girls to this kind of service, and their attendance is also less steadfast.

Following are the percentages of these children reporting attendance at church during the course of a week:

²⁶Bose, R. G., "Religious Concepts of Children," *Religious Education*, 24:831, November, 1929.

²⁷MacLean, A., *The Idea of God in Protestant Education*, Bureau of Publications, Columbia University, 1930, p. 51.

²⁸Lehman, H. C., and Witty, P. A., in *Religious Education*, 22:50, January, 1922.

<i>Ages</i>	<i>Boys</i>	<i>Girls</i>
8½	33	30
9½	31	28
10½	27	24
11½	21	28
12½	28	24
13½	25	27
14½	19	24
15½	30	49

It is hardly a creditable showing when less than one-third of all these children indicate their attendance at church.

Why do these children not go to church? Probably the most important reason is to be found in the lack of attendance of their parents. The materialistic forces of present-day society, emphasizing as they do above all else the pleasure motive, constitute another negative influence. Still another deterrent is the general failure of church services to sustain the interest of children. A church worker reports, for example, that tests given more than 600 young people faithful in church attendance show that they enjoy worship-services only "in a somewhat more than fair degree."²⁰ Their objection seems to be not against the idea of worship but against worship imposed from without. They lean strongly toward worship that is free and spontaneous.

Adolescence and religious experience. Adolescence is notably a time of upheaval. Tremendous physical changes occur. Likewise the social and religious outlook is altered. Not every adolescent experiences a spiritual transformation that matches the physical. But marked psychological changes are common enough at this time to make them general features of adolescence.

Here are a few suggestive evidences of change in the religious experience of adolescents. (1) Attendance at Sunday school declines. One community study shows a perceptible falling off in Sunday school attendance during the period of later adolescence, as summarized in the following table:²¹

²⁰Kelloway, W. F., "Young People's Attitudes Toward Worship," *Religious Education*, 25:303, April, 1930.

²¹Franklin, S. P., "A Community Study: Berea, Ohio," *Religious Education*, 24:310, April, 1929.

<i>Age</i>	<i>Per Cent of Children Attending Sunday school</i>
0-5	46
6-8	54
9-11	51
12-14	67
15-17	60
18-24	40
24	27

(2) Participation in church activity decreases in amount. Studying 1,600 college students, Betts found that only 10 per cent were connected with young people's church societies, whereas 40 per cent belonged to such organizations at home the year preceding their admission to college.³¹ (3) Religious ideology changes most of all. From evidence that is available it appears that religious ideas are profoundly modified. One study reports a correlation between religious attitudes and beliefs of early childhood and those of adolescence of only .208, indicating little relation between the two.³²

How shall we account for these marked changes in the religious thought and practice of the adolescent? The religious changes should be regarded as but a part of the general transformation of his personality. The physical growth now attained by him is quite visible. But the child is trying to achieve his social height as well. He strives to be grown up in mind and manner as he is in body. Being "grown up" means to him being independent of the authority of his elders. Adolescence is thus a time of general emancipation from parental control. It is a period of self-determination. The child begins to scrutinize the concepts he has so far accepted on faith. If the religion he has been taught is vital, this scrutiny only strengthens his faith in it. If the relation between child and his parents has been real and honest up to this time, it too survives the sifting of values. In any case the religious faith to which the child's thinking leads

³¹Betts, G. H., "Religious Attitudes and Activities of University Students," *Religious Education*, 23:917, November, 1928.

³²Shuttleworth, F. K., "Influence of Early Religious Home Training on College Sophomore Men," *Religious Education*, 22:57, January, 1927.

him is now more largely his own. So often the child's renunciation of the religion of his elders is a discard of something he never actually possessed.

The child is thus as a rule more genuinely religious at adolescence than he was previously. He often abandons a great deal of the religious tradition he was taught, but even of such he retains more than is commonly supposed. The fear of a widespread swing to atheism is unfounded. More than half of all adolescents, so far as can be judged, attend either church or Sunday school; this record is better than that of their elders. And here is a report of the religious attitudes of 36,000 college students in 100 colleges widely separated, especially interesting in view of the prevalent idea that irreligion is rampant on college campuses. The study shows that 98 per cent testify to a belief in God, 90 per cent express a belief in immortality, the same proportion holds faith in prayer, and 98 per cent regard religion in some form as a necessary element of life for the individual. As against these declarations, 76 per cent reported membership in church and 69 per cent claimed regular attendance at religious services.³³ These figures suggest that the non-institutional religious allegiance of youth is strong.

VI. Significance of Religious Experience

Values of religious experience. What are the benefits that come to the child from his religious experience? There are three values which are particularly worth noting. The child's religion is capable of providing for him (1) enlargement of personality, (2) a sense of psychic security, and (3) the power for dynamic living.

It is easy to see how vital religious belief extends the bounds of personality. William James once remarked that a man's personality reaches out to the tip of his cane. There is no reason why it cannot be extended to the farthest reaches of the universe. The little child who believes that he is intimately related

³³Reported in Blanchard, P., *The Child and Society*, Longmans, Green, New York, 1928, pp. 163-164.

to the moon and stars—that the moon walks when he walks—has broadened the horizon of his being.⁸⁴

Religion helps the child to feel at home in the world. He may look upon God as his protector. Prayer may be an effective antidote to fear. One very timid child was afraid of imaginary things after she was in bed. Her mother had resorted to various devices in an effort to dissipate the fear, to no avail, when it occurred to her to have her child ask God for His protection. "She has done so and the fear has practically vanished."⁸⁵ On the other hand, another mother tells of her little boy's fear of the dark. To her assurance that God could see him in the dark, he replied, "Oh mother . . . please take God away and leave the light."⁸⁶ God may be used as an antidote to fear provided God himself is not an object of fright, but rather—as Lyman Abbott put it—"the Great Companion."

Again religious conviction invigorates the child's experience. It makes for dynamic living. It is first a sanction for conduct and second a source of strength for achievement. It provides the motive and the momentum. As a rule religious belief acts as a sort of control in the child's life. Children report that they think God watches them all the time, that He has an "all-seeing Eye." The great majority of children believe that one must be good to go to heaven.⁸⁷ Possibly this thought exercises some influence for good over them. But this is not necessarily the case. One little boy who was accused of pilfering the pantry declared that God had told him to take the cookies!⁸⁸ History confirms the view that belief in God does not necessarily conduce to exemplary behavior.

Religious education and child conduct. There is considerable evidence on the point that traditional religious education

⁸⁴Note the suggestive title of Binder, R., *Religion as Man's Completion*, Harper, 1927; also this statement: "The sense of freedom is prominent in religious life . . . the self-expression of the soul is set free," in Seashore, C., *Psychology in Daily Life*, Appleton, 1916, p. 26.

⁸⁵Hartshorne, H., *Childhood and Character*, Pilgrim Press, Boston, 1919, p. 34.

⁸⁶Mumford, E. R., *The Dawn of Religion in the Mind of the Child*, Longmans, Green, New York, 1921, p. 25.

⁸⁷Tanner, A., "Children's Religious Ideas," *Pedagogical Seminary*, 13:511, 1906.

⁸⁸Forest, I., *Child Life and Religion*, Richard H. Smith, New York, 1930, p. 32.

does not necessarily make for moral conduct. By "traditional religious education" reference is intended to such instruction as is confined to the giving of knowledge and the expounding of precepts. It is the kind of instruction to which the child principally *listens*.

Here are a number of indications that such religious education does not have any positive connection with good conduct. Studies of children's religious concepts disclose them to be utterly lacking in ethical content. In reporting the results of an inquiry along this line, Case remarks: "... only 10 per cent of the children seemed to have any ethical motive in thinking of God."³⁹ Again, tests on more than 3,000 children in two states show that Bible knowledge of itself is no guarantee of good behavior. One child who rated only 2 in Bible knowledge did not cheat or lie, while a girl who achieved a score of 100 on the Bible stood at the bottom of the scale on the honesty test. The scores for the entire group indicate "there is no relationship of any consequence between Biblical information and the different phases of conduct studied."⁴⁰ This study does not show that Biblical knowledge is of no value in character building. It does show that mere knowledge does not of itself assure desirable behavior.

The ethical life calls for the *doing* of good. The best way for children to know such a life is for them to live it. And the easiest and surest way for them to learn how to live it is through the good example of their elders. Ethical behavior in children is thus the outcome of an ethical society.

READINGS

1. Alderson, F., "What to Teach My Child About Religion," *Forum*, 82:332, December, 1929.

(What conclusions concerning the retention and application of early religious training can be drawn from the writer's experience in St. Patrick's Cathedral?)

³⁹Case, A., "Children's Ideas of God," *Religious Education*, 16:144, June, 1921.

⁴⁰Report of a study by Prof. P. B. Hightower in *Literary Digest*, October 5, 1929, p. 32. (Based on articles which originally appeared in the *Brooklyn Eagle* and the *New York Herald-Tribune*, September 7, 1929.)

2. Aubrey, E. E., "How the Individual Gets His Religion," *Parents' Magazine*, 6:16, March, 1931.
("It is frequently assumed by psychiatrists that a faith secured by transference is undesirable, but this does not follow." How does the writer support this statement?)
3. Aubrey, E. E., "Religion and Our Children," *Parents' Magazine*, 5:11, December, 1930.
(What are the "three things that each new generation needs as it comes into its own responsibilities"? Do you agree? Why?)
4. Burnett, M., "An Active Children's Church," *Religious Education*, 16:262, October, 1921.
(What uses does this worker make of the "children's hour"? What are the advantages of this arrangement? Why?)
5. Davis, G. T., "Psychology and Now I Lay Me—," *Christian Century*, 46:706, May 29, 1929.
(“Now I Lay Me” is not enough. There is a necessity for the art of prayer.” What is the distinction between the two?)
6. Elliott, G. L., "Religion and the Adolescent," *Child Study*, 8:73, November, 1930.
(“If adolescents revolt against going to church, the protest is likely to have more to do with their parents than with God.” How does the writer support this statement? Do you agree?)
7. Fahs, S. L., "When Children Ask About God," *Child Study*, 8:70, November, 1930.
(What are the general characteristics of the questions that children of various ages ask about religion? Why is this questioning significant?)
8. Freeman, H. A., "First Graders' Religious Ideas," *School and Society*, 34:733, November 28, 1931.
(How do these religious ideas differ from those you expected the children would have? How do you explain the difference?)
9. Haydon, A. E., "The Child's Emotional Life and Religion," in *The Child's Emotions*, Univ. of Chicago Press, Chicago, 1930.
(Why is it undesirable to use God as a sanction for good behavior? Do you agree? Why?)

10. Hoggarth, F. C., "Child's Idea of God," *Homiletic Review*, 101:443, June, 1931.
(From what point of view does the writer approach his topic? What contribution does he make to your thinking on the subject?)
11. Kamiat, A. H., "Theological Education of Children," *Religious Education*, 21:264, June, 1926.
(How does the writer's definition of "creed" explain its hold upon the individual? What stand does the writer take on the question of theological education? What is your own position?)
12. MacLean, A. H., "Something About Sunday School Children," *Child Study*, 8:75, November, 1930.
(What specific ideas do children in general acquire from Sunday school? Upon what ideas do they disagree? Why?)
13. Reid, M. A., "Prayers Children Helped Write," *Parents' Magazine*, 8:25, January, 1933.
(Did the children themselves compose these prayers? What is your opinion as to the value of the method followed? Why?)
14. "Religion of Childhood" (a symposium), *American Childhood*, 13:12, December, 1927.
(Select any two articles for reading. Compare the contribution they make to your understanding of the topic.)
15. Stewart, G., *Can I Teach My Child Religion?* Doubleday, Doran, Garden City, 1929.
(See pp. 111 ff. for a bibliography of religious literature for the child. What is the value of such a list?)
16. Stillman, M. W., "What to Tell the Children," *Forum*, 74:216, August, 1925.
(*"Let us tell them the old, old story."* Why? State and support your own viewpoint on this matter.)
17. Sykes, M., "Shall We Send Our Children to Church?" *Atlantic Monthly*, 140:730, December, 1927.
(What prompts the writer to raise this question? Do you agree with the answer to it? Why?)
18. Watson, G. B., *Experimentation and Measurement in Religious Education*, Association Press, New York, 1927.
(Read Chap. IV. Of the objective tests now available for estimating the child's religious experience, which seem most satisfactory to you? Why? How do you fare on the samples given?)

19. Watson, G. B. and G. H., *Case Studies for Teachers of Religion*, Association Press, New York, 1926.

(Read Chap. III. How can religious teaching be made to carry over into the rest of life? Do you agree with the writers? Why?)

20. Williams-Ellis, A., "Children and Religion," *Spectator*, 145:618, November 1, 1930.

(This is the first article of a series on this topic. Read this one and any succeeding one, and compare them as to merit.)

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